

Item No. 16-g**TOWN OF LAUDERDALE-BY-THE-SEA****AGENDA ITEM REQUEST FORM****ADMINISTRATION**

Department Submitting Request

**John Olinzock**

Dept Head's Signature

<u>Commission Meeting Dates</u>	<u>Last date to turn in to Town Clerk's Office</u>	<u>Commission Meeting Dates</u>	<u>Last date to turn in to Town Clerk's Office</u>	<u>Commission Meeting Dates</u>	<u>Last date to turn in to Town Clerk's Office</u>
<input type="checkbox"/> Nov 10, 2009	Oct. 30 (5:00 p.m.)	<input type="checkbox"/> Jan 26, 2010	Jan 15 (5:00 p.m.)	<input type="checkbox"/> March 23, 2010	Mar 12 (5:00 p.m.)
<input type="checkbox"/> Dec 1, 2009	Nov 20 (5:00 p.m.)	<input type="checkbox"/> Feb 9, 2010	Jan 29 (5:00 p.m.)	<input type="checkbox"/> April 13, 2010	April 2 (5:00p.m.)
<input type="checkbox"/> Dec 8, 2009	Nov 25 (5:00 p.m.)	<input type="checkbox"/> Feb 23, 2010	Feb 12 (5:00 p.m.)	<input type="checkbox"/> April 27, 2010	April 16 (5:00p.m.)
<input checked="" type="checkbox"/> Jan 12, 2010	Dec 31 (5:00 p.m.)	<input type="checkbox"/> Mar 9, 2010	Feb 26 (5:00p.m.)	<input type="checkbox"/> May 11, 2010	April 30 (5:00p.m.)

**NATURE OF AGENDA ITEM**

- |   |   |  |
|---|---|--|
| <input type="checkbox"/> Presentation   | <input type="checkbox"/> Resolution     | <input checked="" type="checkbox"/> New Business |
| <input type="checkbox"/> Report         | <input type="checkbox"/> Ordinance      | <input type="checkbox"/> Manager's Report        |
| <input type="checkbox"/> Consent Agenda | <input type="checkbox"/> Public Hearing | <input type="checkbox"/> Attorney's Report       |
| <input type="checkbox"/> Bids           | <input type="checkbox"/> Old Business   | <input type="checkbox"/> Other                   |

**EXPLANATION:** Discussion and/or Action by Town Commission to Authorize Town Manager to Provide for Letter of Support of Broward County Application for Grant Funds under the Energy Efficiency and Conservation Block Grant Program.

**STAFF RECOMMENDATION:** N/A**BOARD/COMMITTEE RECOMMENDATION:** N/A**FISCAL IMPACT AND APPROPRIATION OF FUNDS:** TBD

- |   |  |
|---|--|
| <input type="checkbox"/> Amount \$ _____            | <input type="checkbox"/> Acct # _____  |
| <input type="checkbox"/> Transfer of funds required | <input type="checkbox"/> From Acct # _____   |
| <input type="checkbox"/> Bid                        | <input type="checkbox"/> Grant <input type="checkbox"/> Amount represents matching funds |

Town Attorney review required

- ☐
- Yes
- ☒
- No

Town Manager's Initials: EO

## **PROJECT SUMMARY**

The “*Gas Recapture and Energy Efficiency with National Environmental Replicability (GREENER)*” Program will be a collaborative, multi-faceted effort that promotes energy efficiency and renewable energy in Broward County, Florida through the reduction and capture of methane and greenhouse gases and the implementation of energy-saving retrofits on governmental buildings. Submitted on behalf of the Broward County Board of County Commissioners, this application represents the combined efforts of the County’s Water and Wastewater Services (WWS) Division, Facilities Maintenance Division, Natural Resources Planning and Management Division, Chevron Energy Solutions and their engineering partner Hazen and Sawyer, and units of local government that did not receive block grant funding and lack the resources to apply independently for federal grant funding.

The project will be under the direction of Mr. Vin Morello, who serves as Project Administrator for WWS. Its goals are to (1) Demonstrate that dramatic reductions in energy consumption and greenhouse gas emissions can be achieved through innovative upgrades to public facilities in Broward County; (2) Develop innovative strategies to support and sustain a countywide energy conservation program, and (3) Promote and enhance the objectives of the American Recovery and Reinvestment Act of 2009, including job creation and building the environmental infrastructure to provide long-term economic benefits.

These goals will be addressed through (1) the construction of a new waste grease receiving facility and installation of a renewable biogas engine to generate renewable energy through the combustion of methane gas at the North Regional Wastewater Treatment Plant; (2) the upgrade of chillers at the North Regional Courthouse; and (3) the implementation of an energy efficiency retrofit grant program for up to 13 units of local government in Broward County that did not receive block grant funding.

The energy cost savings and reductions in greenhouse gas emissions that result from Broward County’s GREENER Program will be significant. When complete, the Biogas to Energy component of the grant will produce power to offset the plant’s daily grid use, while still providing adequate heat for the essential anaerobic digestion process. In addition, initial estimates indicate that implementation of all of the improvements proposed by this project at WWS will result in nearly a 50% reduction of annual energy purchases, or close to \$2 million annually, and will benefit the environment by a reduction of approximately 10,000 tons of carbon and 17 Million kWh per year. The scope and scale of this innovative project will be the first of its kind in the Southeastern United States.

Approximately 20% of the requested funds will be reserved for energy retrofits at other public buildings in Broward County. The implementation of renewable energy technology will begin with Broward County’s North Regional Courthouse, where old chillers will be replaced by newer and more energy efficient models. This retrofit is expected to reduce carbon emissions by 129 metric tons per year and improve efficiencies by 100%, resulting in an annual savings of approximately \$23,000. By offering a 50/50 cost share energy efficiency retrofit grant program to municipalities that did not receive block grant funding, Broward County extends the impetus for energy retrofits, encourages continued efforts toward energy use reduction, and leverages diminishing local dollars for capital improvements.

These improvements are expected to generate more than 30 jobs to help stimulate the local economy. Federal funding will be leveraged using a combination of County General Revenue Funds, Capital Funds, cost share contributions from participating municipalities, cash financing, and revenue bonds. All cost savings generated will be used to create a revolving fund that will provide continued funding to sustain the County’s energy efficiency and conservation programs. Project staff members will monitor the impact of all projects on an ongoing basis and report the impact of emissions reductions and costs savings. The lessons learned and knowledge gained will be shared through community education and outreach.



OFFICE OF THE  
TOWN MANAGER

---

## TOWN OF LAUDERDALE-BY-THE-SEA

---

4501 OCEAN DRIVE • LAUDERDALE-BY-THE-SEA, FL 33308  
TELEPHONE (954) 776-0576 • FAX (954) 776-0578

13 January 2010

Nancy J. Gassman, Ph.D.  
Natural Resources Administrator  
Natural Resources Planning and Management Division  
Broward County Environmental Protection and Growth Management Department  
Suite 301, One North University Drive, Plantation, FL 33324-2038

**Subject:** Support for Broward County, Fl Application for Funding Opportunity  
DE-FOA- 0000148  
U.S. Department of Energy  
Office of Energy Efficiency and Renewable Energy  
Energy Efficiency and Conservation Block Grant Program

**DRAFT**

Dear Contracting Officer:

At the January 12, 2010 Town Commission Meeting, the Town Commission voted to support the Broward County application for grant funds under the federal competitive Energy Efficiency and Conservation Block Grant Program. Specifically, we are interested partners in the 50/50 cost share grant program for retrofit of public facilities. As one of Broward's thirteen municipalities not eligible for formula funding under the block grant, we applaud Broward County's efforts to help obtain and leverage funds for building retrofits in our community.

Should Broward County receive these funds, we plan to participate in the grant program by bringing forth energy saving retrofit projects and leveraging the grant funding with a substantial cost share. Furthermore, we will redirect energy savings associated with our retrofits to support future energy-efficiency improvements.

We recognize that immediate and effective action to reduce greenhouse gas emissions is one important step to improving the resilience and sustainability of our community. We strongly encourage your favorable review of Broward County's grant application.

Sincerely Yours,

Esther Colon  
Town Manager

# **FPL Energy Audit**

## **Town Buildings**



8/24/2009

BEE # 8901000

26503-47129  
TOWN OF LAUD BY THE SEA  
4201 N OCEAN DR  
LAUD BY SEA, FL 33308  
(954) 321-2161

Re: Business Energy Evaluation

Dear Mr. Prince,

Thank you for the opportunity to perform a Business Energy Evaluation of your facility. This comprehensive analysis of your facility's usage allows us to provide you with valuable information and tools. These resources can be very beneficial in helping you plan for, control and manage your energy expenses.

To better understand your facility's energy usage and how we can help you trim energy costs, we first need to get a clear picture of your current energy usage as compared to similar facilities in our service area. Here's what we've found:

**Your facility:**

Age: 44

Size: 50,000 sq. ft

Energy usage: 0.37 kwh/sq. ft./yr.

**Comparable facility:**

Avg. energy usage: 4 kwh/sq. ft./yr

Avg. operating hours/week: 40 - 100 hours per week

Based on our findings, we have developed customized recommendations on how your facility can reduce energy costs through FPL's energy-saving measures, programs and incentives. For example, by implementing the energy-saving measures we recommend, you can save as much as \$296.00 every year on energy costs.

**Itemized projected energy savings:**

◦ <b>Lighting</b>	<u>\$296.00</u>
◦ <b>Insulation</b>	<u>\$0.00</u>
◦ <b>Window</b>	<u>\$0.00</u>
◦ <b>A/C</b>	<u>\$0.00</u>
◦ <b>Motors</b>	<u>\$0.00</u>
◦ <b>Reflective Roof Coating</b>	<u>\$0.00</u>

I congratulate you on taking the first step toward energy savings. If you have any questions about the information I've included, please call me at (954) 321-2037 . If you would like more information on any equipment that you may be considering, visit the Business section of our Web site at [www.FPL.com](http://www.FPL.com) and click on Energy Advisor.

Sincerely,

Jocelyn Wright  
Business Accounts Manager

8/24/2009

BEE # 8901000

26503-47129

TOWN OF LAUD BY THE SEA

4201 N OCEAN DR

LAUD BY SEA, FL 33308

(954) 321-2161



## Recommendations

### LIGHTING

#### General

Turn off lights when not in use.

Install occupancy sensors or wall timers in areas with transient use.

#### Incandescent

Use fluorescent lamps or LED exit sign retrofit kits.

#### Fluorescent

Use T-8 lamps and electronic ballasts.

Low Mercury T-8 lamps and electronic ballast can qualify for an increased FPL incentive.

#### Comments

Observed energy efficient 4lamp, T12- 34 watt fixtures existing in office spaces. The garage area has 8ft-60watt energy efficient lamps. You may consider upgrading to a T-8 system, 32watt electronic ballast.

See Lighting Analysis

You may install occupancy sensors in the break room, bathrooms, etc. These rooms are not being continuously. Sensors can cost in the range from \$30-\$150.00 and come in ceiling or wall mounted. Install LED exit signs. LED lamps can save approximately 90 % total operating costs.

### HEATING, VENTILATION AND AIR CONDITIONING

#### General

Maintain temperatures at 75°F for cooling and 68°F for heating.

Turn off A/C during unoccupied hours.

#### Energy Investments

Replace unit with high efficiency model on as-fail basis.

#### Comments

Evaluated the wall units in office space. Recommendation is to turn off wall units when not occupied. It is to my understanding the wall unit remain on 24/7. Dans office is 1.5 ton unit with an EER of 9.8. in the 2nd office I measured the supply air as 68 deg. The 3rd office has a 1 ton unit with an EER of 9.5. In Mikes office I noticed condensation accumulating around the supply vents. This occurs when warm air from the garage area meets cool air inside the office space. The HVAC unit existing doesn't operate. Seal wall unit on outside wall.

Break -Room: Existing Maytag wall unit 1 ton, 9.5 EER.

### BUILDING

#### General

Caulk and seal doors.

Install weather stripping on doors/windows.

Insulate metal doors.

#### Comments

Noticed garage door opened which is opened to the hot humid environment. This causes extreme heat gain to enter into cooling areas. Measured the loading dock temperature at 93 degrees. The metal ceiling temperature measured 104 degrees. Fire station storage : noticed a chemical smell. The exhaust fan is not

working. You may want to repair and install an auto timer on the exhaust fan to exhaust the chemical smell to the exterior environment.

Seal all exterior doors that has gap openings. This will reduce the amount of heat gain filtering into cooling spaces., thereby reducing the amount of heat gain on the HVAC units.

You may consider installing roof/ceiling insulation. This will reduce the amount of heat gain into the garage area.



8/24/2009

BEE # 8901000

2650347129

TOWN OF LAUD BY THE SEA

4201 N OCEAN DR

LAUD BY SEA, FL 33308

(954) 321-2161

7,008

Operating Hours Per Year

8,760

Hour Per Year AC is on

\$0.00

\$/Kwd Demand Charge

80

Diversity %

\$0.0900

\$/Kwh Energy Charge

12

Months On Peak

1

Tons

13,500

AC Btu Rating



FPL

## EER vs Savings

Use this table to determine the savings to your business when you replace inefficient air conditioning systems with more efficient equipment.

### Annual \$ Savings from High Efficiency A/C Cooling

New Unit EER	Estimated Annual Energy Costs of New Unit	Savings if Current EER										
		6	6.5	7	7.5	8	8.5	9	9.5	10	10.5	11
19.5	\$388	\$873	\$776	\$693	\$621	\$558	\$502	\$453	\$409	\$369	\$333	\$300
19	\$398	\$863	\$766	\$683	\$611	\$548	\$492	\$443	\$398	\$359	\$322	\$290
18.5	\$409	\$852	\$755	\$672	\$600	\$537	\$481	\$432	\$388	\$348	\$312	\$279
18	\$420	\$841	\$744	\$661	\$589	\$526	\$470	\$420	\$376	\$336	\$300	\$268
17.5	\$432	\$829	\$732	\$649	\$577	\$514	\$458	\$408	\$364	\$324	\$288	\$256
17	\$445	\$816	\$719	\$636	\$564	\$501	\$445	\$396	\$351	\$312	\$276	\$243
16.5	\$459	\$803	\$706	\$623	\$550	\$487	\$432	\$382	\$338	\$298	\$262	\$229
16	\$473	\$788	\$691	\$608	\$536	\$473	\$417	\$368	\$324	\$284	\$248	\$215
15.5	\$488	\$773	\$676	\$593	\$521	\$458	\$402	\$353	\$308	\$269	\$233	\$200
15	\$505	\$757	\$660	\$577	\$505	\$442	\$386	\$336	\$292	\$252	\$216	\$183
14.5	\$522	\$739	\$642	\$559	\$487	\$424	\$368	\$319	\$275	\$235	\$199	\$166
14	\$541	\$721	\$624	\$541	\$469	\$405	\$350	\$300	\$256	\$216	\$180	\$147
13.5	\$561	\$701	\$604	\$521	\$449	\$385	\$330	\$280	\$236	\$196	\$160	\$127
13	\$582	\$679	\$582	\$499	\$427	\$364	\$308	\$259	\$214	\$175	\$139	\$106
12.5	\$605	\$656	\$559	\$476	\$404	\$341	\$285	\$235	\$191	\$151	\$115	\$83
12	\$631	\$631	\$534	\$451	\$378	\$315	\$260	\$210	\$166	\$126	\$90	\$57
11.5	\$658	\$603	\$506	\$423	\$351	\$288	\$232	\$183	\$139	\$99	\$63	\$30
11	\$688	\$573	\$476	\$393	\$321	\$258	\$202	\$153	\$109	\$69	\$33	\$0
10.5	\$721	\$541	\$444	\$360	\$288	\$225	\$170	\$120	\$76	\$36	\$0	\$0
10	\$757	\$505	\$408	\$324	\$252	\$189	\$134	\$84	\$40	\$0	\$0	\$0
9.5	\$797	\$465	\$368	\$285	\$212	\$149	\$94	\$44	\$0	\$0	\$0	\$0
9	\$841	\$420	\$323	\$240	\$168	\$105	\$49	\$0	\$0	\$0	\$0	\$0
8.5	\$890	\$371	\$274	\$191	\$119	\$56	\$0	\$0	\$0	\$0	\$0	\$0
8	\$946	\$315	\$218	\$135	\$63	\$0	\$0	\$0	\$0	\$0	\$0	\$0

8/24/2009

BEE # 8901000

26503-47129

TOWN OF LAUD BY THE SEA

4201 N OCEAN DR

LAUD BY SEA, FL 33308

(954) 321-2161

**FPL**

## Air, Steam and Hot Water Leaks

*Identifies the Amount of Energy Loss and Expense You Incur With Leaking Equipment*

Hole Diameter (In.)	Air Wasted By (cu.ft/yr) @120 PSI	Fuel Wasted Btu/Yr (1 x 10 <sup>6</sup> ) Compressed	KWH/Yr	\$ Cost/Yr
3/8	94,360,800	846.80	248,190	\$22,337.10
1/4	41,900,190	376.00	110,200	\$9,918.00
1/8	10,475,050	94.00	27,550	\$2,479.50
1/16	2,623,480	23.50	6,900	\$621.00
1/32	632,480	5.70	1,660	\$149.40
<b>@110 PSI</b>				
3/8	86,834,000	771.50	226,100	\$20,349.00
1/4	38,580,800	342.90	100,500	\$9,045.00
1/8	3,638,600	85.60	25,100	\$2,259.00
1/16	2,412,200	21.50	6,300	\$567.00
1/32	501,000	5.50	1,600	\$144.00
<b>@100 PSI</b>				
3/8	79,900,000	710.00	208,100	\$18,729.00
1/4	35,500,000	315.60	92,500	\$8,325.00
1/8	8,880,000	78.80	23,100	\$2,079.00
1/16	2,220,000	19.80	5,800	\$522.00
1/32	553,000	4.80	1,400	\$126.00
<b>@90 PSI</b>				
3/8	72,697,000	648.30	190,000	\$17,100.00
1/4	33,133,000	294.10	86,300	\$7,767.00
1/8	8,107,000	72.00	21,100	\$1,899.00
1/16	2,027,000	18.10	5,300	\$477.00
1/32	505,000	4.40	1,300	\$117.00
<b>Steam</b>				
Diameter of Hole	@100 PSIG	\$ Cost./Day	Lb/hr @300PSI	
1/16"	14	\$2.24	33	\$5.28
1/8"	56	\$8.96	132	\$21.12
3/16"	126	\$20.16	297	\$47.52
1/4"	224	\$35.84	528	\$84.48
<b>Water</b>				
	Gal/Hr @20 PSIG	\$ Cost./Day	Gal/Hr @ 100 PSIG	\$ Cost./Day
1/16"	20	\$2.76	45	\$6.21
1/8"	80	\$11.04	180	\$24.83
3/16"	180	\$24.83	405	\$55.88
1/4"	320	\$44.15	720	\$99.33

Dollar amounts assume that the cost of gas is \$0.45 per therm and that water is \$2.00 per thousand gallons.

Your prices may vary.

Information source: Handbook of Energy Engineering 2nd edit. By Albert Thurman P.E.&D. Paul Mehca, Ph.D

8/24/2009

BEE # 8901000

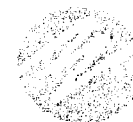
26503-47129

TOWN OF LAUD BY THE SEA

4201 N OCEAN DR

LAUD BY SEA, FL 33308

(954) 321-2161



**FPL**

## Business Energy Evaluation Summary

### Lighting:

	Lamp Tech	# of Fixt	Lamps /Fixt	Lamp Type	Ballast Type	Oper Hr/Yr	Kwh Save/Yr	Annual Savings	Kw Saved
Existing	Fluorescent	12	4	34 Watt-T12	E.S. Magnetic	3000			
Proposed	Fluorescent	12	2	32 Watt-T8 LM	Electronic	3000	3060	\$ 276.00	1.02
	Comments: Offices								
Existing	Fluorescent	7	2	34 Watt-T12	E.S. Magnetic	2400			
Proposed	Fluorescent	7	2	32 Watt-T8 LM	Electronic	2400	219	\$ 20.00	0.09
	Comments: Various								

Note: KW and kWh savings amounts stated above are estimated only. Actual demand, energy and electric cost savings may vary. Select a vendor from FPL's list of Participating vendors. Savings estimates are for a "typical" customer.

Please see Implementation Cost and Payback Analysis report for details.

8/24/2009

26503-47129

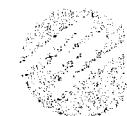
TOWN OF LAUD BY THE SEA

4201 N OCEAN DR

LAUD BY SEA, FL 33308

(954) 321-2161

BEE No. 8901000



**FPL**

## Implementation Cost and Payback Analysis

### Lighting:

	<u>Lamp Tech</u>	<u># of Fixt</u>	<u>Lamps</u>	<u>Lamp Type</u>	<u>Ballast Type</u>	<u>Cost</u>	<u>Savings</u>	<u>Rebate</u>	<u>Payback</u>
Existing	Fluorescent	12	4	34 Watt-T12	E.S. Magnetic				
Proposed	Fluorescent	12	2	32 Watt-T8 LM	Electronic	\$ 900.00	\$ 276.00	\$ 15.60	3.2 Years
<b>Comments:</b> Offices									
Existing	Fluorescent	7	2	34 Watt-T12	E.S. Magnetic				
Proposed	Fluorescent	7	2	32 Watt-T8 LM	Electronic	\$ 525.00	\$ 20.00	\$ 9.10	25.8 Years
<b>Comments:</b> Various									

Note: Select a vendor from FPL's list of Participating vendors. The vendor will measure and make all determinations of incentives and cost to install. All incentive amounts will be finalized on the actual installed products and will not be confirmed until post-approval.



**FPL**

8/24/2009

BEE # 8901000

26503-47129

TOWN OF LAUD BY THE SEA

4201 N OCEAN DR

LAUD BY SEA, FL 33308

(954) 321-2161

## General Information

### **Where your Energy Dollars Go:**

I've also included an Energy Use Report to show where your company is spending most of its energy dollars. It shows which equipment or appliances are consuming the most energy in your facility. You can use this information to better understand your current usage and help you determine which energy-saving measures make the most economic sense for your business.

Equipment	# of Units	Tons/ Unit	Total Tons	kWh/ Month	Peak kW	Est Cost	% of Bill
<b>HVAC</b>							
Wall Unit	1	1.5	1.5	922	1.5	\$83	24.6%
	Comments: Office #1						
Wall Unit	1	1.0	1.0	635	1.0	\$57	16.9%
	Comments: Office #2 Fredrich						
Wall Unit	1	1.1	1.1	699	1.1	\$63	18.6%
	Comments: Break Room -Maytag						
<b>Sub Total</b>			<b>3.6</b>	<b>2256</b>	<b>3.6</b>	<b>\$203</b>	<b>60.1%</b>
<b>LIGHTING</b>							
Fluorescent 34 Watt-T12 4ft Lamp	12			432	1.7	\$39	11.5%
	Comments: Offices, break room , Gordans Bay,Estimated opr. hrs						
Fluorescent 34 Watt-T12 4ft Lamp	7			101	0.5	\$9	2.7%
	Comments: Varios locations throughout						
<b>Sub Total</b>				<b>533</b>	<b>2.2</b>	<b>\$48</b>	<b>14.2%</b>
<b>OTHER EQUIPMENT</b>							
Electric Motor	0.25 Hp 1			0	0.0	\$0	0.0%
	Comments: Floor Fan						
Ice Machine	0.75 Hp 1			321	0.6	\$29	8.6%
	Comments: Ice machine-Leased						

<u>Equipment</u>	<u># of Units</u>	<u>kWh/ Month</u>	<u>Peak kW</u>	<u>Est Cost</u>	<u>% of Bill</u>
Electric Motor	1.50 Hp 1	645	1.1	\$58	17.2%
Comments: exhaust fan					

Sub Total	966	1.7	\$87	25.7%
Bill Amount:	3755	8	\$338	100.0%

Electric Charges

0.0900 \$/Kwh  
.00 \$/Kwd

Equipment	# of Units	Tons/ Unit	Total Tons	Est Kw/Each	Conn Kw	Oper Hrs/Mn	kWh/ Month	Peak Kw	Est Cost	% of Bill
<b>HVAC</b>										
Wall Unit	1	1.5	1.5	1.83	1.83	504	922	1.5	\$83	24.6%
	Comments: Office #1									
Wall Unit	1	1.0	1.0	1.26	1.26	504	635	1.0	\$57	16.9%
	Comments: Office #2 Fredrich									
Wall Unit	1	1.1	1.1	1.39	1.39	504	699	1.1	\$63	18.6%
	Comments: Break Room -Maytag									
<b>Sub Total</b>			<b>3.6</b>		<b>4.48</b>		<b>2,256.00</b>	<b>3.6</b>	<b>\$203</b>	<b>60.1%</b>
<b>LIGHTING</b>										
Fluorescent 34 Watt-T12 4ft Lamp	12			0.14	1.73	250	432	1.7	\$39	11.5%
	Comments: Offices, break room , Gordans Bay,Estimated opr. hrs									
Fluorescent 34 Watt-T12 4ft Lamp	7			0.07	0.50	200	101	0.5	\$9	2.7%
	Comments: Varios locations throughout									
<b>Sub Total</b>					<b>2.23</b>		<b>533.00</b>	<b>2.2</b>	<b>\$48</b>	<b>14.2%</b>
<b>OTHER EQUIPMENT</b>										
Electric Motor	0.25Hp 1			0.19	0.00	432	0	0.0	\$0	0.0%
	Comments: Floor Fan									
Ice Machine	0.75Hp 1			0.56	0.56	576	321	0.6	\$29	8.6%
	Comments: Ice machine-Leased									



Equipment		# of Units	Est Kw/Each	Conn Kw	Oper Hrs/Mn	kWh/ Month	Peak Kw	Est Cost	% of Bill
Electric Motor	1.50Hp	1	1.12	1.12	576	645	1.1	\$58	17.2%
Comments: exhaust fan									

Sub Total			1.68			966.00	1.7	\$87	25.7%
Bill Amount:			8.39			3755	8	\$338	100.0%

Electric Charges

0.0900 \$/Kwh

.00 \$/Kwd

8/24/2009

26503-47129

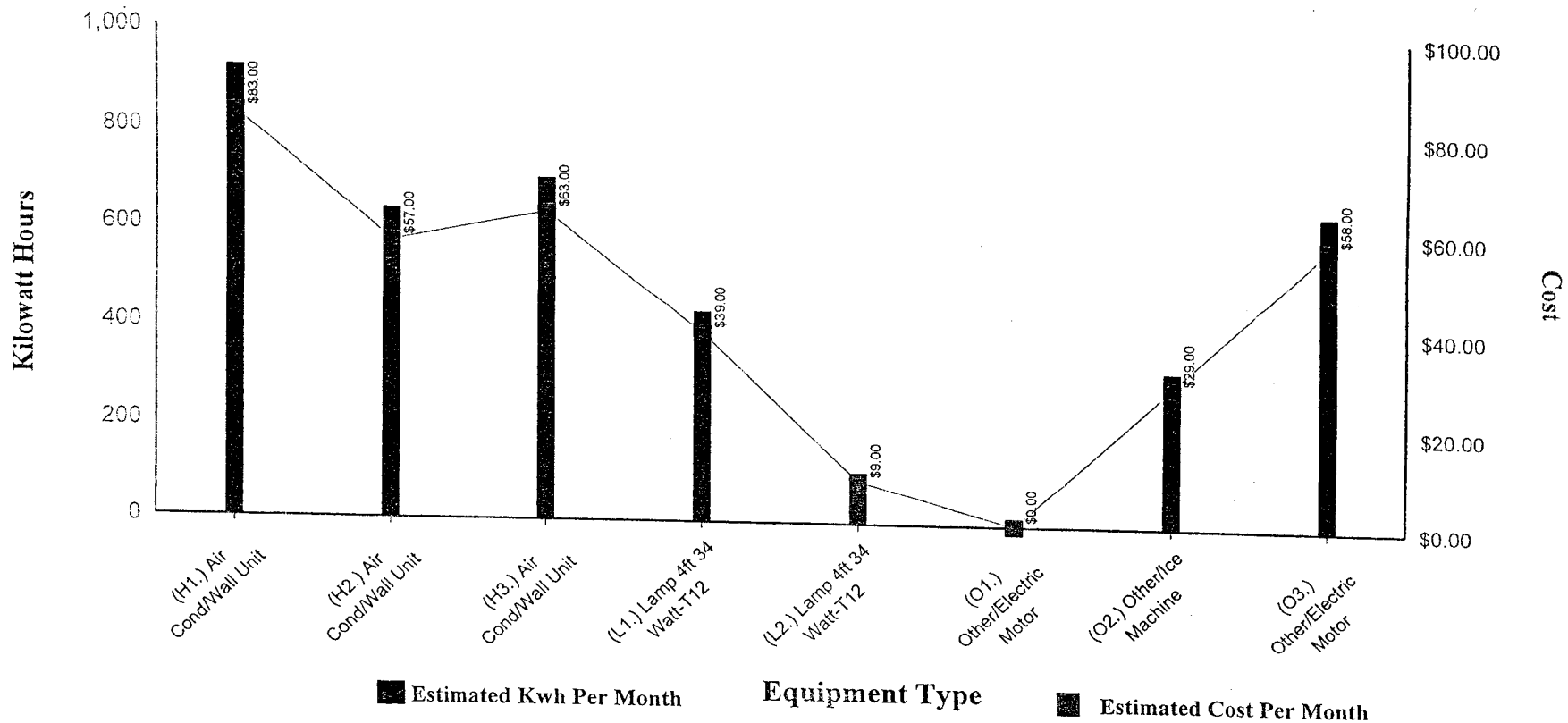
TOWN OF LAUD BY THE SEA  
4201 N OCEAN DR  
LAUD BY SEA, FL 33308  
(954) 321-2161

BEE # 8901000



**FPL**

## Kilowatt Hour Usage & Cost by Equipment



8/24/2009

26503-47129

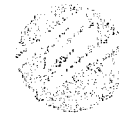
TOWN OF LAUD BY THE SEA

4201 N OCEAN DR

LAUD BY SEA, FL 33308

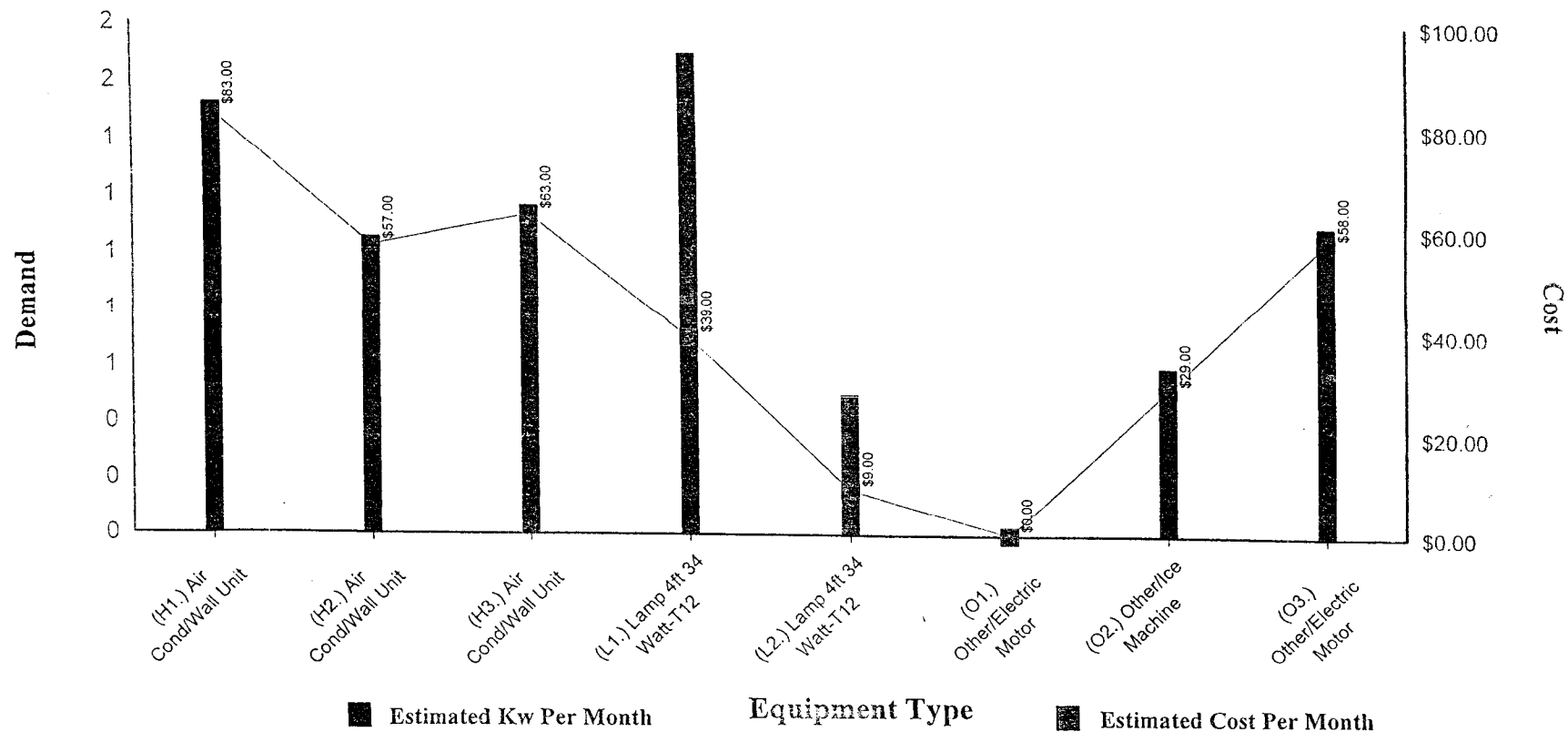
(954) 321-2161

BEE # 8901000



**FPL**

## Demand Usage & Cost by Equipment



8/24/2009

BEE # 8901000

26503-47129

TOWN OF LAUD BY THE SEA

4201 N OCEAN DR

LAUD BY SEA, FL 33308

(954) 321-2161

**FPL**

## 2 Year Usage History Report

*Shows your facility's current 12 month's energy consumption pattern to the previous 12 months*

Billing Date	Days	KWH per Day	kWh	kWd	Load Factor %	Current Bill	Balance Due
07/31/2009	30	64	1,915	0	0%	\$233.71	\$233.71
07/01/2009	29	58	1,692	0	0%	\$207.58	\$207.58
06/02/2009	32	53	1,697	0	0%	\$210.73	\$210.73
05/01/2009	29	46	1,327	0	0%	\$166.79	\$166.79
04/02/2009	29	44	1,268	0	0%	\$161.05	\$161.05
03/04/2009	29	39	1,142	0	0%	\$145.94	\$144.86
02/03/2009	32	45	1,449	0	0%	\$182.72	\$182.72
01/02/2009	32	45	1,426	0	0%	\$181.79	\$181.79
12/01/2008	33	40	1,333	0	0%	\$170.63	\$170.63
10/29/2008	29	54	1,578	0	0%	\$199.80	\$199.80
09/30/2008	32	63	2,014	0	0%	\$252.42	\$252.42
08/29/2008	29	63	1,825	0	0%	\$229.61	\$229.61
<b>Totals/Avg</b>	<b>30</b>	<b>51</b>	<b>18,666</b>			<b>\$2,342.77</b>	
07/31/2008	30	63	1,893	0	0%	\$221.51	\$221.51
07/01/2008	29	62	1,810	0	0%	\$212.18	\$212.18
06/02/2008	32	56	1,805	0	0%	\$211.62	\$211.62
05/01/2008	29	45	1,310	0	0%	\$156.12	\$156.12
04/02/2008	29	42	1,210	0	0%	\$144.75	\$144.75
03/04/2008	29	41	1,189	0	0%	\$142.41	\$142.41
02/04/2008	32	41	1,315	0	0%	\$156.52	\$156.52
01/03/2008	34	47	1,606	0	0%	\$190.38	\$190.38
11/30/2007	31	43	1,347	0	0%	\$161.17	\$161.17
10/30/2007	29	61	1,760	0	0%	\$207.80	\$207.80
10/01/2007	32	62	1,982	0	0%	\$232.85	\$232.85
08/30/2007	29	68	1,969	0	0%	\$231.37	\$231.37
<b>Totals/Avg</b>	<b>30</b>	<b>53</b>	<b>19,196</b>			<b>\$2,268.68</b>	

## Comparison of Average Temperature to Usage

### Min, Max, and Avg Temp, Cooling and Heating Degree Days

**Current Billing Period By Cycle Day**  
Avg

Day	Min	Max	Temp	CDD	HDD
Wed-Jul -1-09	75	90	81	16	0
Thu-Jul -2-09	76	88	80	15	0
Fri-Jul -3-09	76	93	82	17	0
Sat-Jul -4-09	78	89	83	18	0
Sun-Jul -5-09	78	91	84	19	0
Mon-Jul -6-09	79	94	86	21	0
Tue-Jul -7-09	80	95	87	22	0
Wed-Jul -8-09	81	93	85	20	0
Thu-Jul -9-09	79	92	85	20	0
Fri-Jul -10-09	79	89	84	19	0
Sat-Jul -11-09	77	91	84	19	0
Sun-Jul -12-09	77	92	84	19	0
Mon-Jul -13-09	80	91	84	19	0
Tue-Jul -14-09	79	91	85	20	0
Wed-Jul -15-09	82	92	85	20	0
Thu-Jul -16-09	81	93	86	21	0
Fri-Jul -17-09	82	93	87	22	0
Sat-Jul -18-09	80	93	85	20	0
Sun-Jul -19-09	78	93	84	19	0
Mon-Jul -20-09	74	90	81	16	0
Tue-Jul -21-09	74	90	82	17	0
Wed-Jul -22-09	80	92	85	20	0
Thu-Jul -23-09	81	90	83	18	0
Fri-Jul -24-09	78	90	84	19	0
Sat-Jul -25-09	74	86	80	15	0
Sun-Jul -26-09	75	91	80	15	0
Mon-Jul -27-09	77	90	83	18	0
Tue-Jul -28-09	80	90	84	19	0
Wed-Jul -29-09	79	90	82	17	0
Thu-Jul -30-09	79	87	83	18	0
Fri-Jul -31-09	80	91	85	20	0

**Last Month Billing Period This Year**  
Avg

Day	Min	Max	Temp	CDD	HDD
Mon-Jun -1-09	74	85	78	13	0
Tue-Jun -2-09	74	86	79	14	0
Wed-Jun -3-09	75	88	81	16	0
Thu-Jun -4-09	78	87	82	17	0
Fri-Jun -5-09	75	87	78	13	0
Sat-Jun -6-09	71	87	77	12	0
Sun-Jun -7-09	73	88	79	14	0
Mon-Jun -8-09	75	88	80	15	0
Tue-Jun -9-09	74	87	79	14	0
Wed-Jun -10-09	75	90	82	17	0
Thu-Jun -11-09	77	90	83	18	0
Fri-Jun -12-09	79	91	84	19	0
Sat-Jun -13-09	78	91	83	18	0
Sun-Jun -14-09	78	94	83	18	0
Mon-Jun -15-09	78	93	84	19	0
Tue-Jun -16-09	80	92	84	19	0
Wed-Jun -17-09	77	91	83	18	0
Thu-Jun -18-09	79	91	84	19	0
Fri-Jun -19-09	77	91	82	17	0
Sat-Jun -20-09	77	93	83	18	0
Sun-Jun -21-09	79	95	85	20	0
Mon-Jun -22-09	81	97	87	22	0
Tue-Jun -23-09	73	87	79	14	0
Wed-Jun -24-09	76	91	82	17	0
Thu-Jun -25-09	78	90	82	17	0
Fri-Jun -26-09	75	89	80	15	0
Sat-Jun -27-09	75	91	83	18	0
Sun-Jun -28-09	77	88	81	16	0
Mon-Jun -29-09	78	90	81	16	0
Tue-Jun -30-09	73	89	79	14	0

**Same Billing Period Last Year**  
Avg

Day	Min	Max	Temp	CDD	HDD
Tue-Jul -1-08	77	90	81	16	0
Wed-Jul -2-08	72	89	79	14	0
Thu-Jul -3-08	75	90	81	16	0
Fri-Jul -4-08	76	89	82	17	0
Sat-Jul -5-08	77	86	80	15	0
Sun-Jul -6-08	76	85	80	15	0
Mon-Jul -7-08	75	89	83	18	0
Tue-Jul -8-08	76	93	84	19	0
Wed-Jul -9-08	81	89	84	19	0
Thu-Jul -10-08	81	90	84	19	0
Fri-Jul -11-08	79	90	84	19	0
Sat-Jul -12-08	74	88	80	15	0
Sun-Jul -13-08	75	85	79	14	0
Mon-Jul -14-08	77	87	81	16	0
Tue-Jul -15-08	73	86	76	11	0
Wed-Jul -16-08	75	88	79	14	0
Thu-Jul -17-08	73	90	82	17	0
Fri-Jul -18-08	80	91	84	19	0
Sat-Jul -19-08	79	90	84	19	0
Sun-Jul -20-08	81	90	85	20	0
Mon-Jul -21-08	81	90	85	20	0
Tue-Jul -22-08	76	90	84	19	0
Wed-Jul -23-08	74	89	82	17	0
Thu-Jul -24-08	73	85	78	13	0
Fri-Jul -25-08	74	89	82	17	0
Sat-Jul -26-08	75	90	83	18	0
Sun-Jul -27-08	76	89	82	17	0
Mon-Jul -28-08	76	90	83	18	0
Tue-Jul -29-08	78	90	83	18	0
Wed-Jul -30-08	77	90	82	17	0
Thu-Jul -31-08	78	91	82	17	0

	Curr	Prev	Prev Yr
TOTAL HEATING DEGREE	0	0	0
TOTAL COOLING DEGREE	578	497	523
DAYS 92 AND ABOVE	12	6	1
DAYS BELOW 45	0	0	0

	Curr	Prev Mn	Prev Yr
HIGHEST TEMPERATURE	95	97	93
AVERAGE LOW TEMPERATURE	78	76	77
AVERAGE HIGH TEMPERATURE	91	90	89
LOWEST TEMPERATURE	74	71	72
AVERAGE OVERALL TEMP	84	82	82

8/24/2009

BEE # 8901000

2650347129

TOWN OF LAUD BY THE SEA

4201 N OCEAN DR

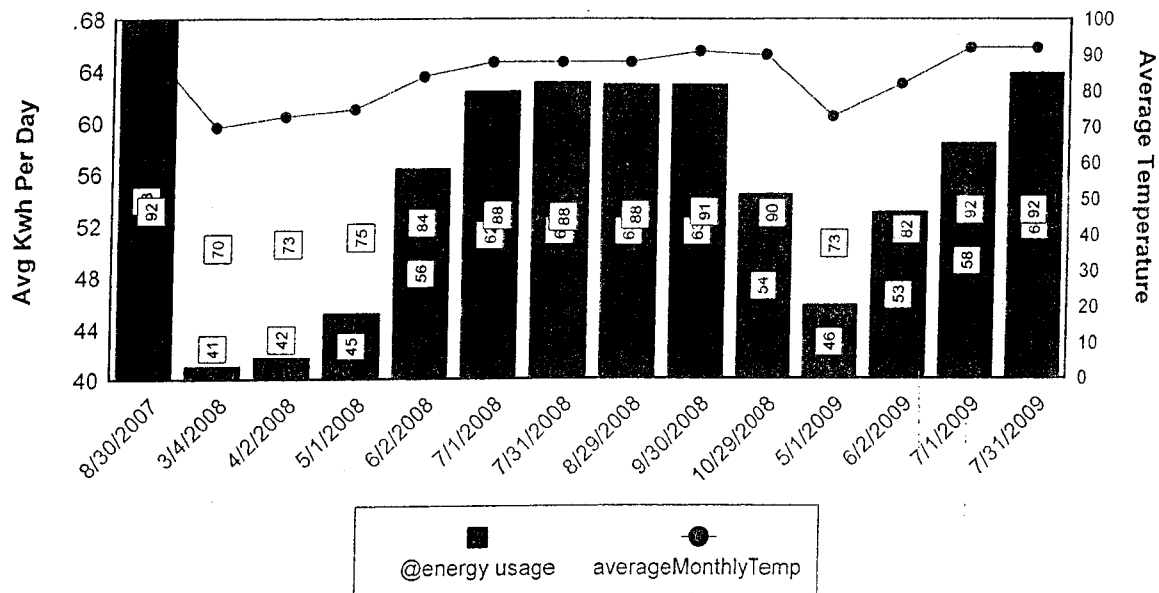
LAUD BY SEA, FL 33308

(954) 321-2161



FPL

## Temperature vs KWH



8/24/2009

26503-47129

TOWN OF LAUD BY THE SEA

4201 N OCEAN DR

LAUD BY SEA, FL 33308

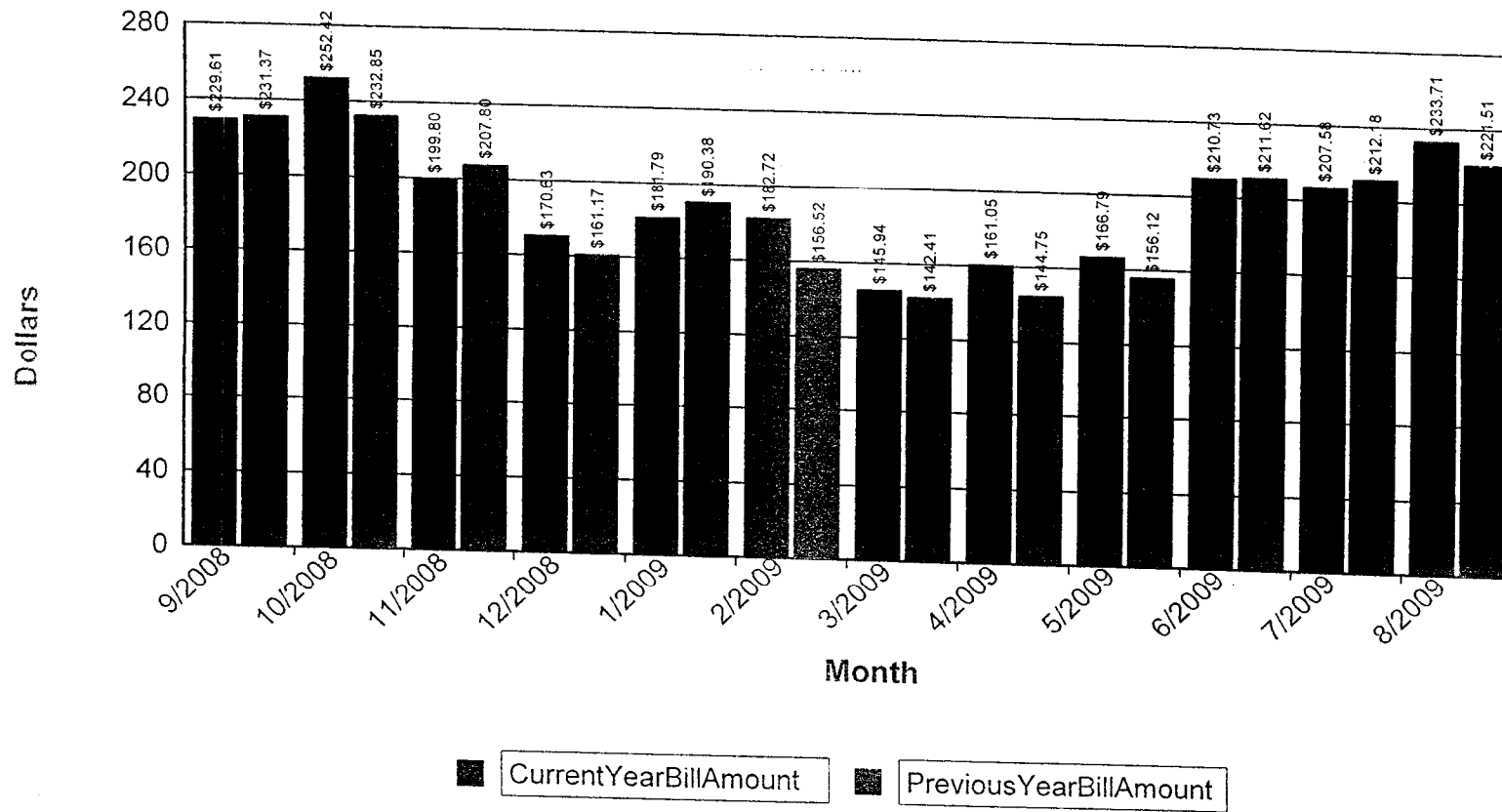
(954)321-2161

BEE # 8901000



**FPL**

## Bill Amount Comparison





8/24/2009

26503-47129

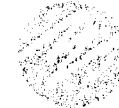
TOWN OF LAUD BY THE SEA

4201 N OCEAN DR

LAUD BY SEA, FL 33308

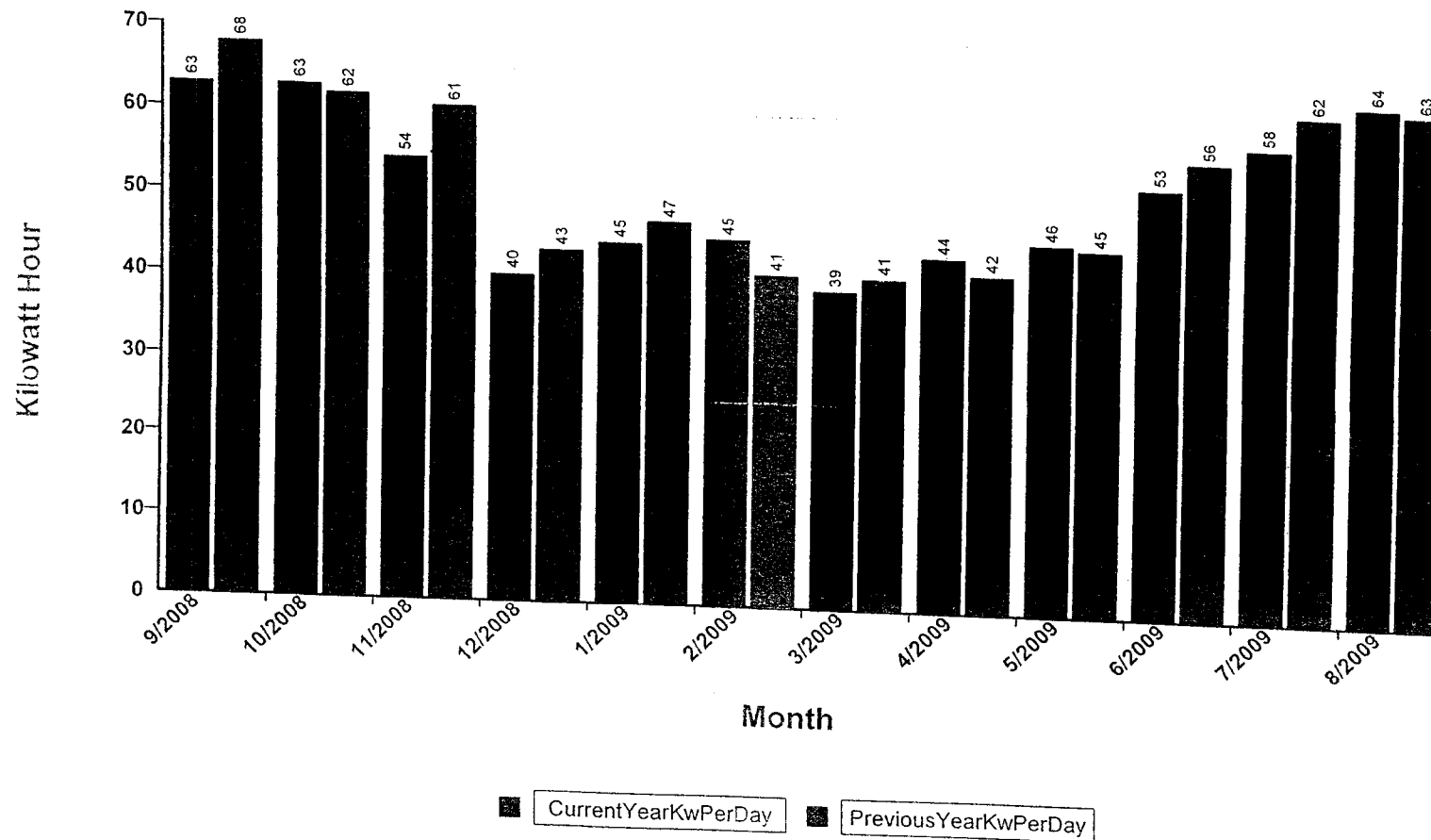
(954)321-2161

BEE #8901000



**FPL**

## KWH Per Day Comparison





9/29/2009

BEE # 8210301

85753-43176

TOWN OF LAUD BY THE SEA

4501 N OCEAN DR # FIRE STATION/T

LAUD BY SEA, FL 33308

(954) 776-0576

Re: Business Energy Evaluation

Dear Mr. Prince,

Thank you for the opportunity to perform a Business Energy Evaluation of your facility. This comprehensive analysis of your facility's usage allows us to provide you with valuable information and tools. These resources can be very beneficial in helping you plan for, control and manage your energy expenses.

To better understand your facility's energy usage and how we can help you trim energy costs, we first need to get a clear picture of your current energy usage as compared to similar facilities in our service area. Here's what we've found:

**Your facility:**

Age: 44

Size: 50,000 sq. ft

Energy usage: 3.47 kwh/sq. ft./yr.

**Comparable facility:**

Avg. energy usage: 17 kwh/sq. ft./yr

Avg. operating hours/week: 41 - 60 hours per week

Based on our findings, we have developed customized recommendations on how your facility can reduce energy costs through FPL's energy-saving measures, programs and incentives. For example, by implementing the energy-saving measures we recommend, you can save as much as \$1,736.00 every year on energy costs.

**Itemized projected energy savings:**

° <b>Lighting</b>	<u>\$1,736.00</u>
° <b>Insulation</b>	<u>\$0.00</u>
° <b>Window</b>	<u>\$0.00</u>
° <b>A/C</b>	<u>\$0.00</u>
° <b>Motors</b>	<u>\$0.00</u>
° <b>Reflective Roof Coating</b>	<u>\$0.00</u>

In fact, if you install qualifying energy upgrades, you can earn \$26.00 in FPL incentives. But before you implement any of the recommended upgrades, purchase new equipment or start an energy-improvement project, we encourage you to contact FPL or one of our participating independent contractors so we can help you select the most efficient equipment for your budget. From there, your contractor will credit you for the amount of your FPL incentive.

Specific FPL incentives include:

- ° **Lighting** \$26.00
- ° **Insulation** \$0.00
- ° **Window** \$0.00
- ° **A/C** \$0.00
- ° **Reflective Roof Coating** \$0.00

I congratulate you on taking the first step toward energy savings. If you have any questions about the information I've included, please call me at (954) 321-2037. If you would like more information on any equipment that you may be considering, visit the Business section of our Web site at [www.FPL.com](http://www.FPL.com) and click on Energy Advisor.

Sincerely,

Jocelyn Wright  
Business Accounts Manager

9/29/2009

BEE # 8210301

85753-43176

TOWN OF LAUD BY THE SEA

4501 N OCEAN DR # FIRE STATION/T

LAUD BY SEA, FL 33308

(954) 776-0576



## Recommendations

### LIGHTING

#### General

Install occupancy sensors or wall timers in areas with transient use.

#### Incandescent

Use fluorescent lamps or LED exit sign retrofit kits.

#### Fluorescent

Use T-8 lamps and electronic ballasts.

Low Mercury T-8 lamps and electronic ballast can qualify for an increased FPL incentive.

#### Comments

The bay area consists of 60watt 8ft lamps. The sleeping quarters consists of 40watt lamps. Consider installing Occupancy Sensors in closets, storage, and office areas.

Consider replacing bay area lighting to T-5 or T-8 lamps with electronic ballast. Convert lighting in sleeping quarters to T-8, 32watt low wattage lamps. (See Lighting Analysis)

### HEATING, VENTILATION AND AIR CONDITIONING

#### General

Clean Condenser and/or Evaporator Coils.

#### Comments

Observed window opened with 51 % humidity level while HVAC operating. The Air Processing System next to a lamp fixture. Replace exit signs to LED. (See Tech Briefs Enclosed) The exhaust fan operates manually. Consider installing an automatic switch on exhaust fan to reduce heat gain in bay area.

### WATER HEATING

#### General

Reduce temperature settings.

Reduce hot water usage/install flow restrictors.

Insulate tanks/hot water lines.

Install timer and operate during off peak hours.

#### Comments

Low cost measure: Insulate hot water pipe on water heater maintaining hot water temperature longer, reducing heat loss in pipes.

Consider flow restrictors in bathroom faucets only reducing water usage and costs.

### BUILDING

#### General

Close door/windows when using air conditioning.

Seal holes in wall/ceilings.

#### Comments

Observed ceiling tile removed. The opening in the ceiling is allowing additional heat gain into cooling space. Therefore causing additional heat gain on the HVAC system, increasing cooling costs.

9/29/2009

BEE # 8210301

85753-43176

TOWN OF LAUD BY THE SEA

4501 N OCEAN DR # FIRE STATION/T

LAUD BY SEA, FL 33308

(954) 776-0576



**FPL**

## Business Energy Evaluation Summary

### Lighting:

	Lamp Tech	# of Fixt	Lamps /Fixt	Lamp Type	Ballast Type	Oper Hr/Yr	Kwh Save/Yr	Annual Savings	Kw Saved
Existing	Fluorescent	16	4	60 Watt-T12	E.S. Magnetic	8640			
Proposed	Fluorescent	16	2	32 Watt-T8 LM	Elec-Tandem	8640	25298	\$ 1,610.00	2.93
	Comments:								
Existing	Fluorescent	4	4	40 Watt-T12	E.S. Magnetic	3000			
Proposed	Fluorescent	4	2	32 Watt-T8 LM	Electronic	3000	1404	\$ 126.00	0.47
	Comments:								

Note: KW and kWh savings amounts stated above are estimated only. Actual demand, energy and electric cost savings may vary. Select a vendor from FPL's list of Participating vendors. Savings estimates are for a "typical" customer.

Please see Implementation Cost and Payback Analysis report for details.

9/29/2009

85753-43176

TOWN OF LAUD BY THE SEA

4501 N OCEAN DR # FIRE STATION/T

LAUD BY SEA, FL 33308

(954) 776-0576

BEE No. 8210301



**FPL**

## Implementation Cost and Payback Analysis

### Lighting:

	<u>Lamp Tech</u>	<u># of Fixt</u>	<u>Lamps</u>	<u>Lamp Type</u>	<u>Ballast Type</u>	<u>Cost</u>	<u>Savings</u>	<u>Rebate</u>	<u>Payback</u>
Existing	Fluorescent	16	4	60 Watt-T12	E.S. Magnetic				
Proposed	Fluorescent	16	2	32 Watt-T8 LM	Elec-Tandem	\$ 0.00	\$ 1,610.00	\$ 20.80	Immediate

### Comments:

Existing	Fluorescent	4	4	40 Watt-T12	E.S. Magnetic				
Proposed	Fluorescent	4	2	32 Watt-T8 LM	Electronic	\$ 240.00	\$ 126.00	\$ 5.20	1.86 Years

### Comments:

Note: Select a vendor from FPL's list of Participating vendors. The vendor will measure and make all determinations of incentives and cost to install. All incentive amounts will be finalized on the actual installed products and will not be confirmed until post-approval.



9/29/2009

BEE # 8210301

85753-43176

TOWN OF LAUD BY THE SEA

4501 N OCEAN DR # FIRE STATION

LAUD BY SEA, FL 33308

(954) 776-0576

## General Information

### **Where your Energy Dollars Go:**

I've also included an Energy Use Report to show where your company is spending most of its energy dollars. It shows which equipment or appliances are consuming the most energy in your facility. You can use this information to better understand your current usage and help you determine which energy-saving measures make the most economic sense for your business.

### **Power Monitoring Service:**

FPL's Power Monitoring Service is a remote monitoring system designed to let you know within minutes if a momentary interruption, high- or low-voltage event or power outage has occurred at your facility, and when power was restored the system immediately notifies FPL of the event, which can help reduce costly equipment damage and keep your facility operating. Because it's available 24 hours a day, the service is ideal for facility managers who do not staff around the clock or manage multiple facilities. (For more information about this valuable service, please refer to the enclosed Power Monitoring brochure.)

09/29/2009

85753-43176

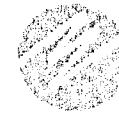
TOWN OF LAUD BY THE SEA

4501 N OCEAN DR # FIRE STATION/T

LAUD BY SEA, FL 33308

(954) 776-0576

BEE # 8210301



**FPL**

## Energy Use Summary Report

Equipment	# of Units	kWh/ Month	Peak kW	Est Cost	% of Bill
<b>LIGHTING</b>					
Fluorescent 60 Watt-T12 8ft Lamp	16	2696	3.7	\$172	57.5%
Comments: Bay Area Lighting					
Fluorescent 40 Watt-T12 4ft Lamp	4	176	0.7	\$16	5.4%
Comments: Sleeping Quarters					
<b>Sub Total</b>		<b>2872</b>	<b>4.4</b>	<b>\$188</b>	<b>62.9%</b>
<b>OTHER EQUIPMENT</b>					
Water Heater	1	1512	3.5	\$111	37.1%
Comments: 30 gal water heater 2-3500 watt elements					
<b>Sub Total</b>		<b>1512</b>	<b>3.5</b>	<b>\$111</b>	<b>37.1%</b>
<b>Bill Amount:</b>		<b>4384</b>	<b>8</b>	<b>\$298</b>	<b>100.0%</b>

### Electric Charges

0.0500 \$/Kwh

10.00 \$/Kwd



09/29/2009

85753-43176

TOWN OF LAUD BY THE SEA

4501 N OCEAN DR # FIRE STATION/T

LAUD BY SEA, FL 33308

(954) 776-0576

BEE # 8210301



**FPL**

## Energy Use Detail Report

*Analysis of your major equipment's impact on your energy bill*

Equipment	# of Units	Est Kw/Each	Conn Kw	Oper Hrs/Mn	kWh/ Month	Peak Kw	Est Cost	% of Bill
<b>LIGHTING</b>								
Fluorescent 60 Watt-T12 8ft Lamp	16	0.23	3.74	720	2696	3.7	\$172	57.5%
Comments: Bay Area Lighting								
Fluorescent 40 Watt-T12 4ft Lamp	4	0.18	0.70	250	176	0.7	\$16	5.4%
Comments: Sleeping Quarters								
<b>Sub Total</b>			<b>4.45</b>		<b>2,872.00</b>	<b>4.4</b>	<b>\$188</b>	<b>62.9%</b>
<b>OTHER EQUIPMENT</b>								
Water Heater	1	3.50	3.50	432	1512	3.5	\$111	37.1%
Comments: 30 gal water heater 2-3500 watt elements								
<b>Sub Total</b>			<b>3.50</b>		<b>1,512.00</b>	<b>3.5</b>	<b>\$111</b>	<b>37.1%</b>
<b>Bill Amount:</b>			<b>7.95</b>		<b>4384</b>	<b>8</b>	<b>\$298</b>	<b>100.0%</b>

### Electric Charges

0.0500 \$/Kwh

10.00 \$/Kwd

9/29/2009

BEE # 8210301

85753-43176

TOWN OF LAUD BY THE SEA

4501 N OCEAN DR # FIRE STATION/T

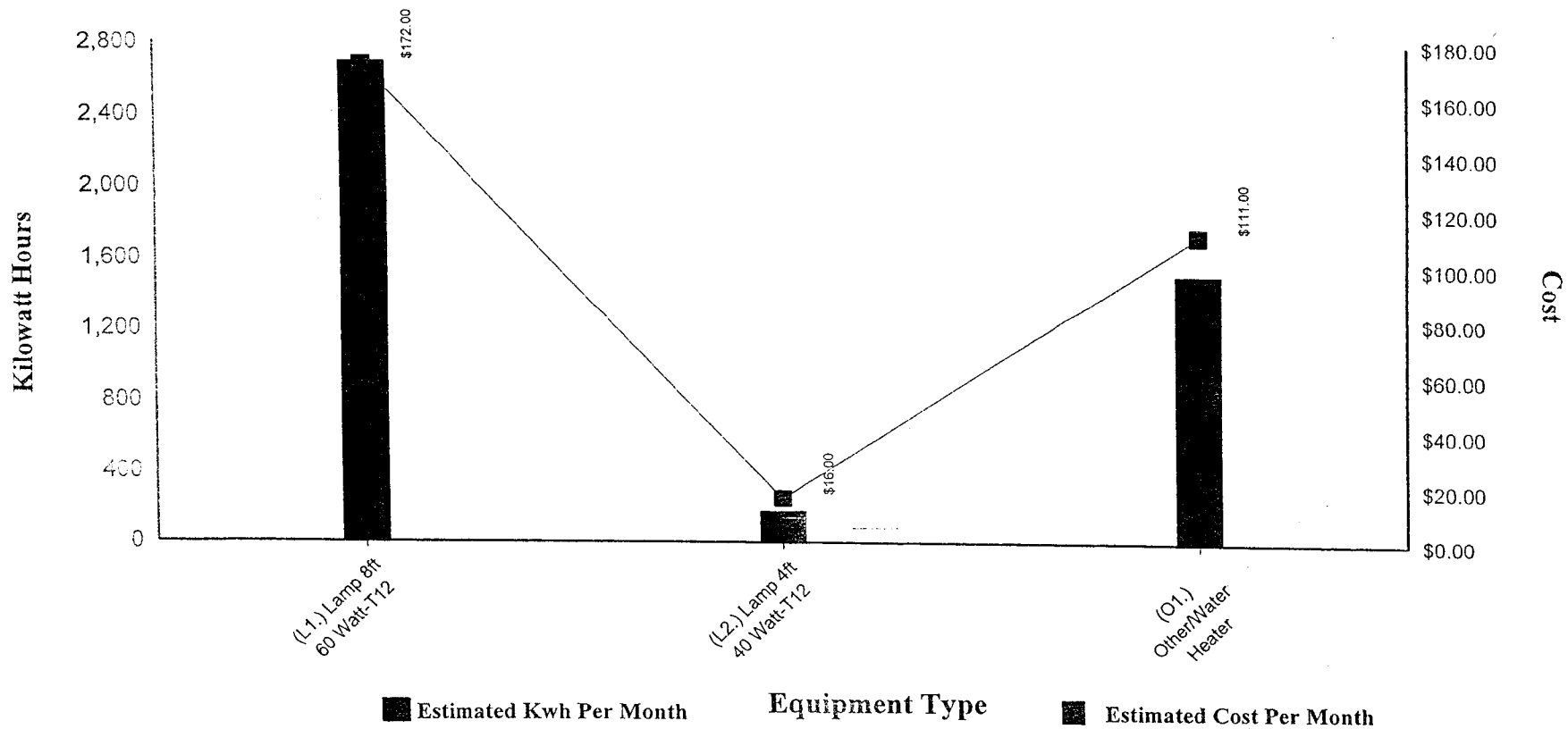
LAUD BY SEA, FL 33308

(954) 776-0576



**FPL**

## Kilowatt Hour Usage & Cost by Equipment



9/29/2009

85753-43176

TOWN OF LAUD BY THE SEA

4501 N OCEAN DR # FIRE STATION/T

LAUD BY SEA, FL 33308

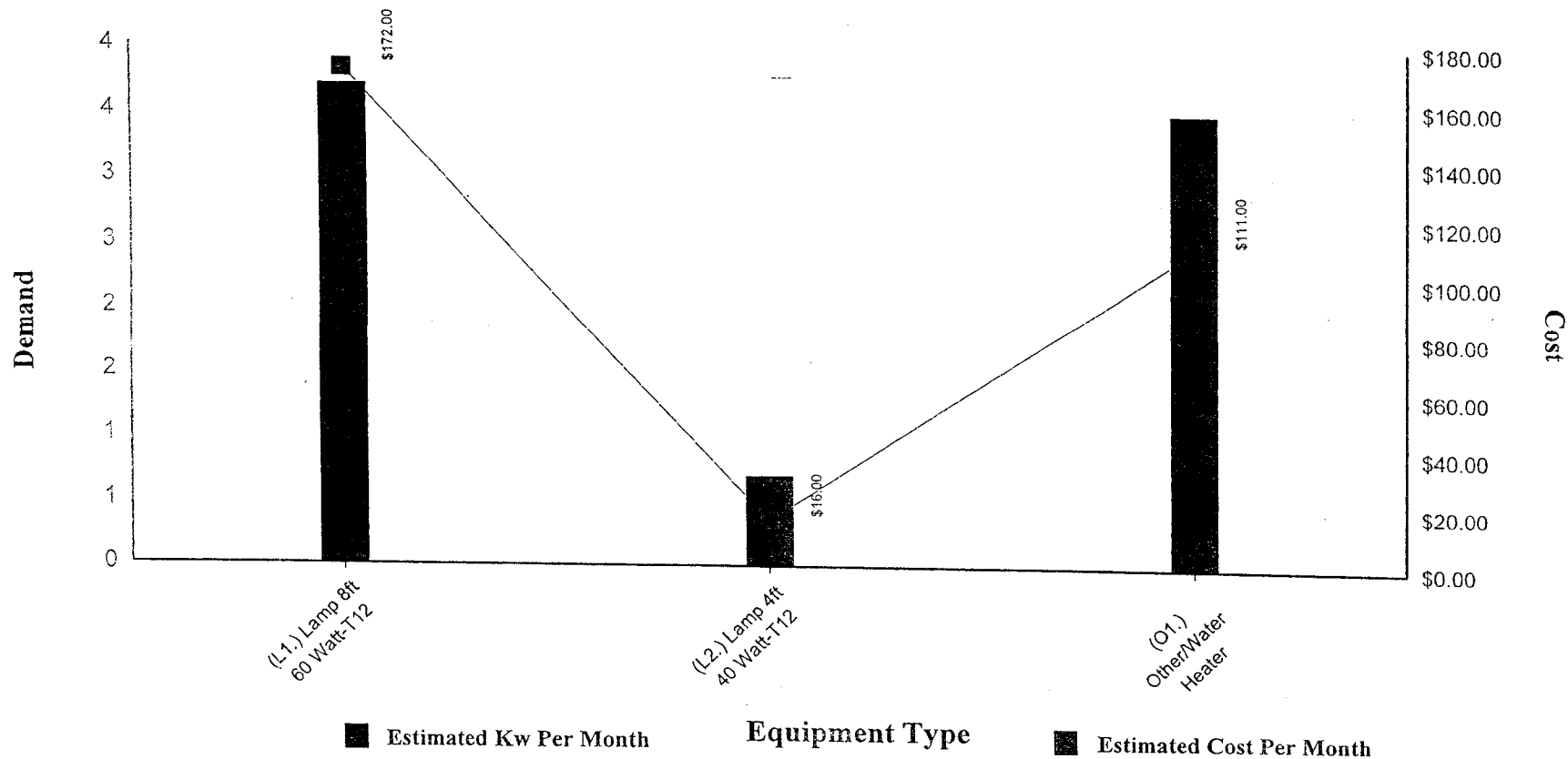
(954) 776-0576

BEE # 8210301



**FPL**

## Demand Usage & Cost by Equipment



9/29/2009

BEE # 8210301

85753-43176

TOWN OF LAUD BY THE SEA

4501 N OCEAN DR # FIRE STATION/T

LAUD BY SEA, FL 33308

(954) 776-0576

**FPL**

## 2 Year Usage History Report

*Shows your facility's current 12 month's energy consumption pattern to the previous 12 months*

Billing Date	Days	KWH per Day	kWh	kWd	Load Factor %	Current Bill	Balance Due
09/03/2009	29	648	18,780	52	52%	\$1,990.34	\$1,990.34
08/05/2009	29	606	17,580	53	48%	\$1,880.53	\$1,880.53
07/07/2009	32	549	17,580	49	47%	\$1,847.81	\$1,847.81
06/05/2009	30	506	15,180	43	49%	\$1,606.07	\$1,606.07
05/06/2009	29	449	13,020	37	51%	\$1,403.48	\$1,403.48
04/07/2009	29	451	13,080	35	54%	\$1,401.12	\$1,401.12
03/09/2009	31	352	10,920	31	47%	\$1,190.23	\$1,179.92
02/06/2009	30	364	10,920	40	38%	\$1,263.85	\$1,263.85
01/07/2009	34	383	13,020	43	37%	\$1,461.62	\$1,461.62
12/04/2008	31	379	11,760	41	39%	\$1,360.77	\$1,360.77
11/03/2008	31	538	16,680	49	46%	\$1,847.99	\$1,847.99
10/03/2008	29	523	15,180	45	48%	\$1,684.58	\$1,684.58
<b>Totals/Avg</b>	<b>30</b>	<b>479</b>	<b>173,700</b>	<b>43</b>	<b>46%</b>	<b>\$18,938.39</b>	
09/04/2008	30	508	15,240	44	48%	\$1,682.47	\$1,682.47
08/05/2008	29	542	15,720	50	45%	\$1,768.10	\$1,768.10
07/07/2008	32	551	17,640	44	52%	\$1,738.68	\$1,738.68
06/05/2008	30	498	14,940	43	48%	\$1,520.03	\$1,520.03
05/06/2008	29	414	12,000	40	43%	\$1,267.98	\$1,267.98
04/07/2008	31	399	12,360	34	49%	\$1,251.15	\$1,251.15
03/07/2008	29	410	11,880	43	40%	\$1,279.51	\$1,279.81
02/07/2008	30	420	12,600	40	44%	\$1,313.84	\$1,313.84
01/08/2008	34	365	12,420	41	37%	\$1,307.10	\$1,307.10
12/05/2007	33	436	14,400	36	51%	\$1,436.48	\$1,436.48
11/02/2007	29	581	16,860	42	58%	\$1,674.64	\$1,674.64
10/04/2007	29	583	16,920	42	58%	\$1,679.75	\$1,679.75
<b>Totals/Avg</b>	<b>30</b>	<b>476</b>	<b>172,980</b>	<b>42</b>	<b>48%</b>	<b>\$17,919.73</b>	

## Comparison of Average Temperature to Usage Min, Max, and Avg Temp, Cooling and Heating Degree Days

**Current Billing Period By Cycle Day**  
Avg

Day	Min	Max	Temp	CDD	HDD
Wed-Aug -5-09	82	92	85	20	0
Thu-Aug -6-09	80	90	85	20	0
Fri-Aug -7-09	81	92	86	21	0
Sat-Aug -8-09	82	91	86	21	0
Sun-Aug -9-09	83	92	86	21	0
Mon-Aug -10-09	79	91	84	19	0
Tue-Aug -11-09	78	90	83	18	0
Wed-Aug -12-09	81	91	84	19	0
Thu-Aug -13-09	79	90	84	19	0
Fri-Aug -14-09	82	92	86	21	0
Sat-Aug -15-09	74	86	79	14	0
Sun-Aug -16-09	76	91	84	19	0
Mon-Aug -17-09	80	91	85	20	0
Tue-Aug -18-09	81	92	85	20	0
Wed-Aug -19-09	76	88	83	18	0
Thu-Aug -20-09	82	91	86	21	0
Fri-Aug -21-09	81	92	86	21	0
Sat-Aug -22-09	78	91	82	17	0
Sun-Aug -23-09	79	90	82	17	0
Mon-Aug -24-09	78	89	82	17	0
Tue-Aug -25-09	78	91	84	19	0
Wed-Aug -26-09	79	90	84	19	0
Thu-Aug -27-09	78	92	84	19	0
Fri-Aug -28-09	81	92	85	20	0
Sat-Aug -29-09	81	94	85	20	0
Sun-Aug -30-09	79	91	84	19	0
Mon-Aug -31-09	80	91	84	19	0
Tue-Sep -1-09	77	89	81	16	0
Wed-Sep -2-09	78	88	80	15	0
Thu-Sep -3-09	77	91	80	15	0

**Last Month Billing Period This Year**  
Avg

Day	Min	Max	Temp	CDD	HDD
Sun-Jul -5-09	78	91	84	19	0
Mon-Jul -6-09	79	94	86	21	0
Tue-Jul -7-09	80	95	87	22	0
Wed-Jul -8-09	81	93	85	20	0
Thu-Jul -9-09	79	92	85	20	0
Fri-Jul -10-09	79	89	84	19	0
Sat-Jul -11-09	77	91	84	19	0
Sun-Jul -12-09	77	92	84	19	0
Mon-Jul -13-09	80	91	84	19	0
Tue-Jul -14-09	79	91	85	20	0
Wed-Jul -15-09	82	92	85	20	0
Thu-Jul -16-09	81	93	86	21	0
Fri-Jul -17-09	82	93	87	22	0
Sat-Jul -18-09	80	93	85	20	0
Sun-Jul -19-09	78	93	84	19	0
Mon-Jul -20-09	74	90	81	16	0
Tue-Jul -21-09	74	90	82	17	0
Wed-Jul -22-09	80	92	85	20	0
Thu-Jul -23-09	81	90	83	18	0
Fri-Jul -24-09	78	90	84	19	0
Sat-Jul -25-09	74	86	80	15	0
Sun-Jul -26-09	75	91	80	15	0
Mon-Jul -27-09	77	90	83	18	0
Tue-Jul -28-09	80	90	84	19	0
Wed-Jul -29-09	79	90	82	17	0
Thu-Jul -30-09	79	87	83	18	0
Fri-Jul -31-09	80	91	85	20	0
Sat-Aug -1-09	81	90	85	20	0
Sun-Aug -2-09	82	90	86	21	0
Mon-Aug -3-09	83	92	86	21	0
Tue-Aug -4-09	83	92	86	21	0

**Same Billing Period Last Year**  
Avg

Day	Min	Max	Temp	CDD	HDD
Tue-Aug -5-08	79	91	84	19	0
Wed-Aug -6-08	81	91	85	20	0
Thu-Aug -7-08	80	93	84	19	0
Fri-Aug -8-08	80	89	83	18	0
Sat-Aug -9-08	78	92	83	18	0
Sun-Aug -10-08	75	88	80	15	0
Mon-Aug -11-08	77	89	82	17	0
Tue-Aug -12-08	75	87	80	15	0
Wed-Aug -13-08	75	93	84	19	0
Thu-Aug -14-08	74	91	80	15	0
Fri-Aug -15-08	75	91	83	18	0
Sat-Aug -16-08	79	92	85	20	0
Sun-Aug -17-08	80	90	84	19	0
Mon-Aug -18-08	74	83	78	13	0
Tue-Aug -19-08	77	86	81	16	0
Wed-Aug -20-08	79	88	82	17	0
Thu-Aug -21-08	77	90	81	16	0
Fri-Aug -22-08	74	90	81	16	0
Sat-Aug -23-08	78	89	83	18	0
Sun-Aug -24-08	77	89	83	18	0
Mon-Aug -25-08	77	90	83	18	0
Tue-Aug -26-08	80	91	83	18	0
Wed-Aug -27-08	79	91	85	20	0
Thu-Aug -28-08	81	90	85	20	0
Fri-Aug -29-08	80	89	84	19	0
Sat-Aug -30-08	81	86	83	18	0
Sun-Aug -31-08	80	88	84	19	0
Mon-Sep -1-08	81	91	85	20	0
Tue-Sep -2-08	80	90	84	19	0
Wed-Sep -3-08	81	89	84	19	0

	Curr	Prev	Prev Yr
TOTAL HEATING DEGREE	0	0	0
TOTAL COOLING DEGREE	564	595	536
DAYS 92 AND ABOVE	9	13	4
DAYS BELOW 45	0	0	0

	Curr	Prev Mn	Prev Yr
HIGHEST TEMPERATURE	94	95	93
AVERAGE LOW TEMPERATURE	79	79	78
AVERAGE HIGH TEMPERATURE	91	91	90
LOWEST TEMPERATURE	74	74	74
AVERAGE OVERALL TEMP	84	84	83

9/29/2009

BEE # 8210301

8575343176

TOWN OF LAUD BY THE SEA

4501 N OCEAN DR # FIRE STATION/T

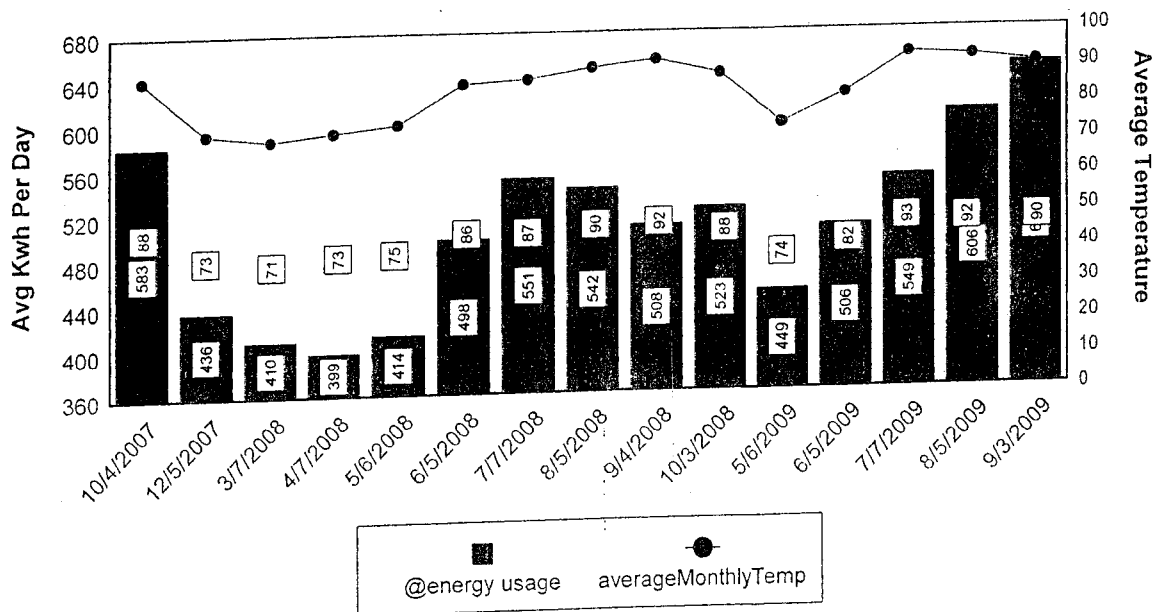
LAUD BY SEA, FL 33308

(954) 776-0576

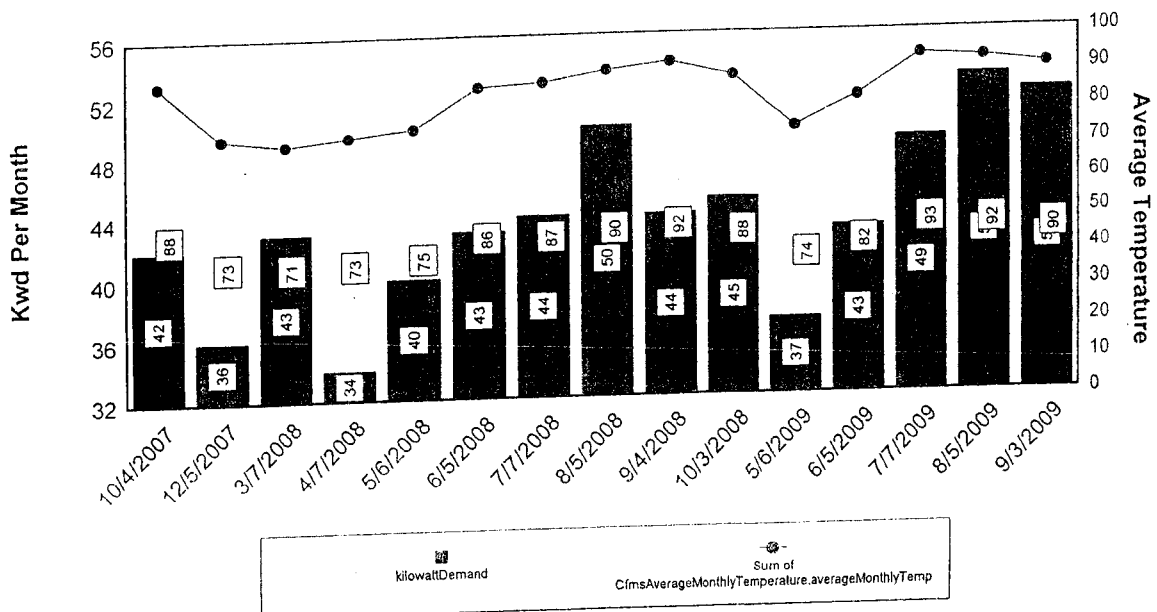


FPL

## Temperature vs KWH



## Temperature vs KWD



9/29/2009

85753-43176

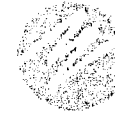
TOWN OF LAUD BY THE SEA

4501 N OCEAN DR # FIRE STATION/T

LAUD BY SEA, FL 33308

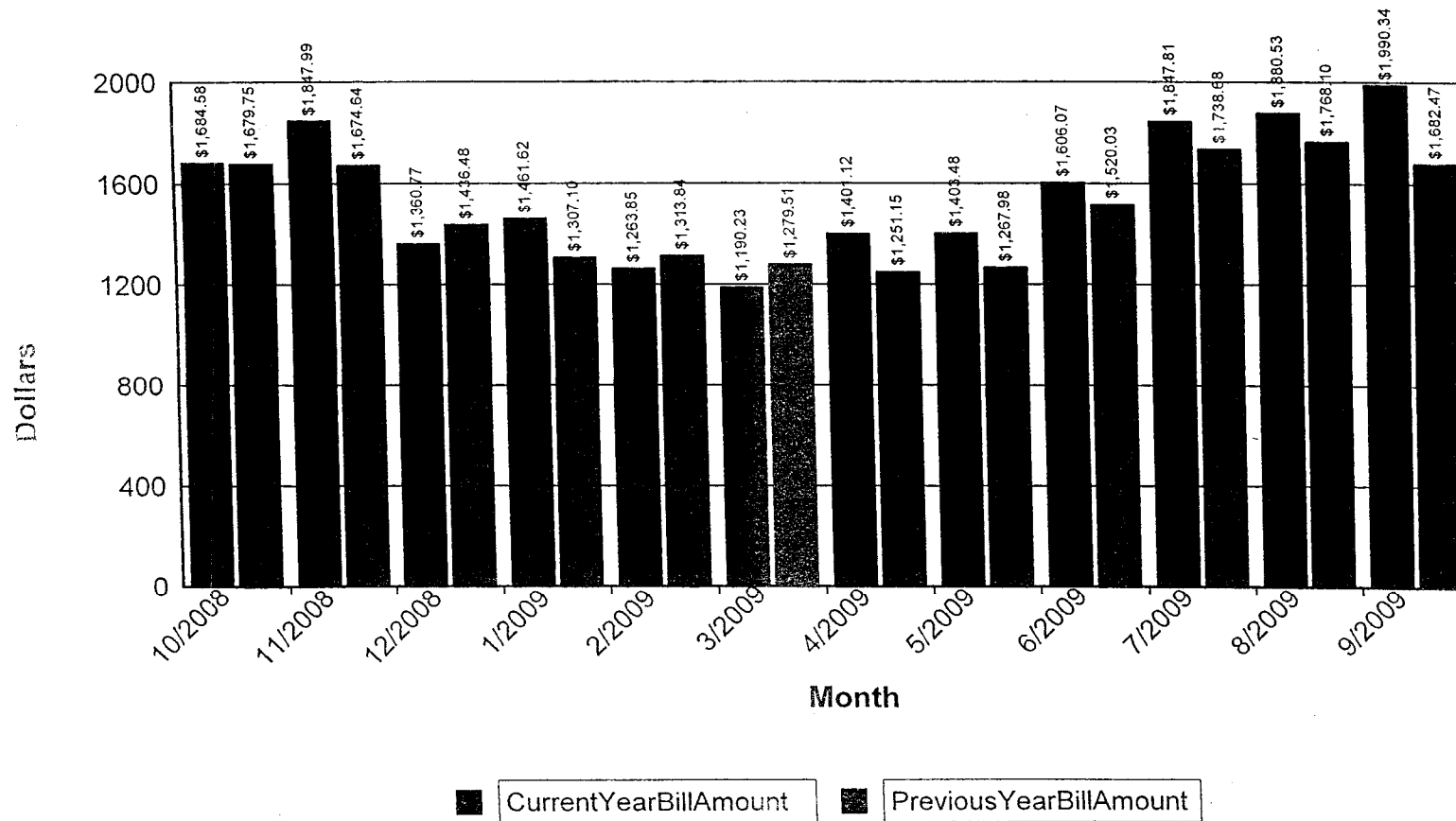
(954)776-0576

BEE # 8210301



**FPL**

## Bill Amount Comparison





9/29/2009

85753-43176

TOWN OF LAUD BY THE SEA

4501 N OCEAN DR # FIRE STATION/T

LAUD BY SEA, FL 33308

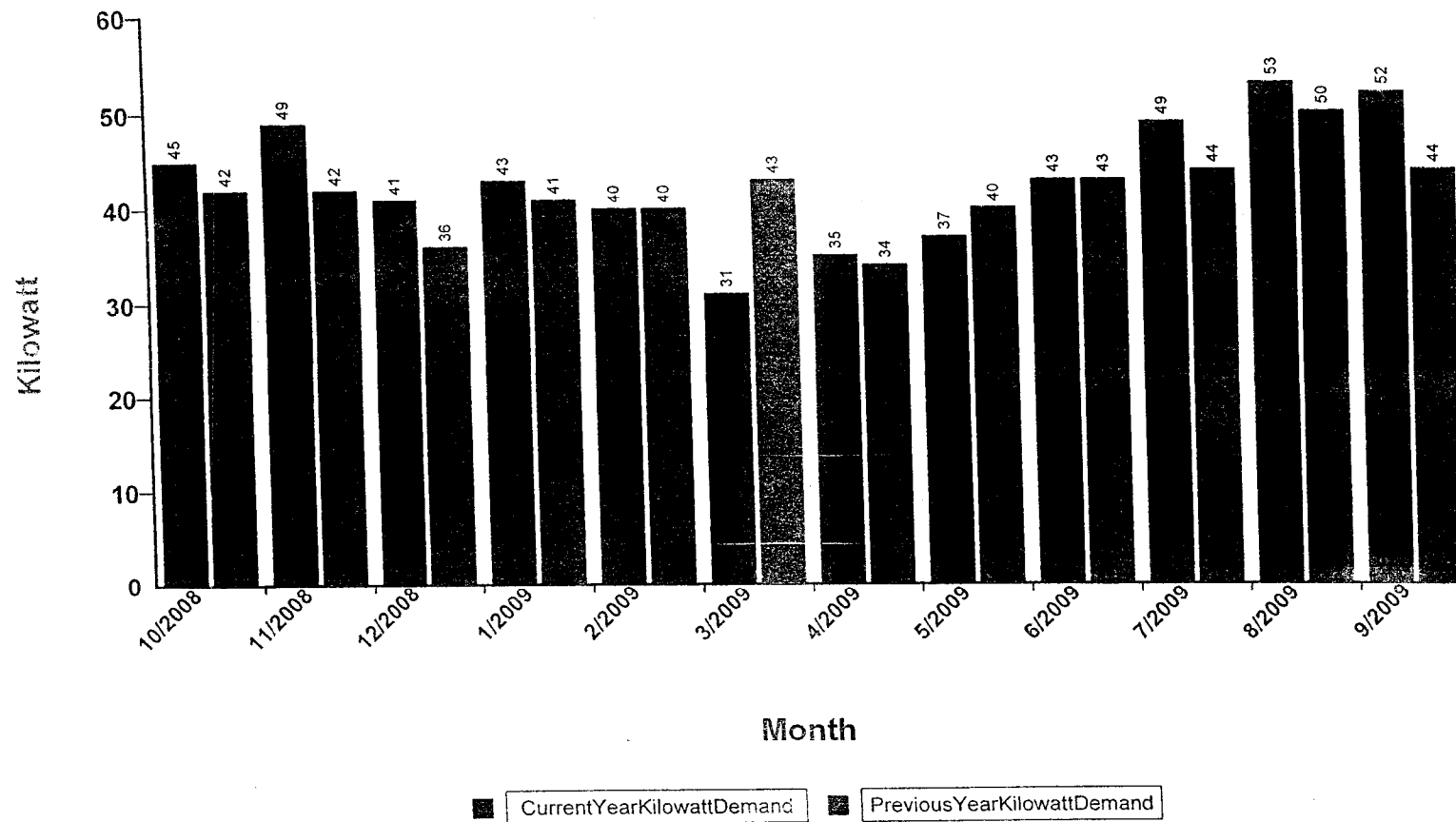
(954)776-0576

BEE # 8210301



**FPL**

## Monthly Demand Comparison



9/29/2009

85753-43176

TOWN OF LAUD BY THE SEA

4501 N OCEAN DR # FIRE STATION/T

LAUD BY SEA, FL 33308

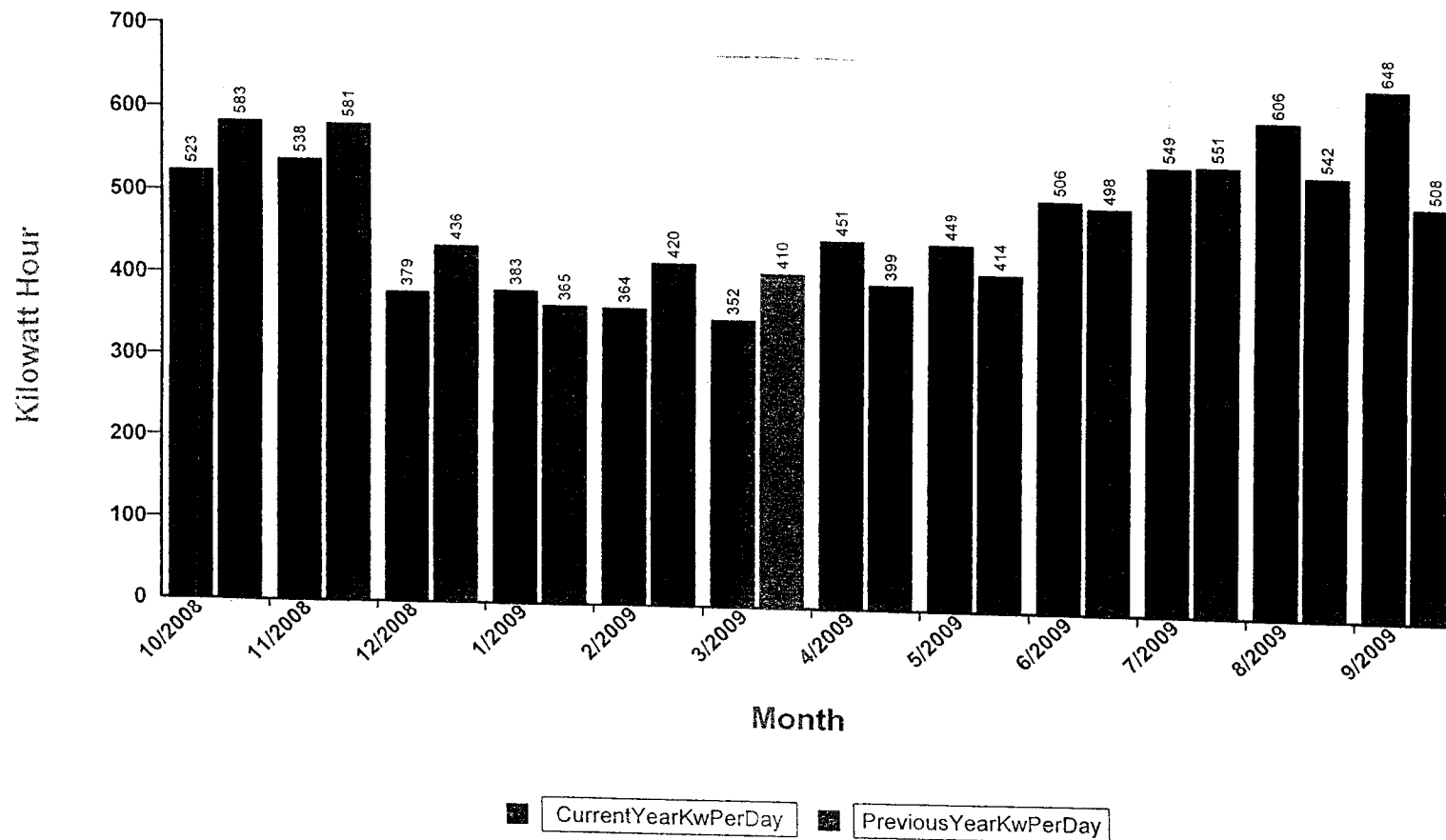
(954)776-0576

BEE #8210301



**FPL**

## KWH Per Day Comparison





9/28/2009

BEE # 7634473

25005-43430  
TOWN OF LAUD BY THE SEA  
4513 N OCEAN DR  
LAUD BY SEA, FL 33308  
(954) 275-0908

Re: Business Energy Evaluation

Dear Mr. Prince,

Thank you for the opportunity to perform a Business Energy Evaluation of your facility. This comprehensive analysis of your facility's usage allows us to provide you with valuable information and tools. These resources can be very beneficial in helping you plan for, control and manage your energy expenses.

To better understand your facility's energy usage and how we can help you trim energy costs, we first need to get a clear picture of your current energy usage as compared to similar facilities in our service area. Here's what we've found:

**Your facility:**

Age: 1  
Size: 7,500 sq. ft  
Energy usage: 8.04 kwh/sq. ft./yr.

**Comparable facility:**

Avg. energy usage: 16 kwh/sq. ft./yr  
Avg. operating hours/week: 41 - 60 hours per week

I congratulate you on taking the first step toward energy savings. If you have any questions about the information I've included, please call me at (954) 321-2037. If you would like more information on any equipment that you may be considering, visit the Business section of our Web site at [www.FPL.com](http://www.FPL.com) and click on Energy Advisor.

Sincerely,

Jocelyn Wright  
Business Accounts Manager

9/28/2009

BEE # 7634473

25005-43430

TOWN OF LAUD BY THE SEA

4513 N OCEAN DR

LAUD BY SEA, FL 33308

(954) 275-0908



**FPL**

## Recommendations

### LIGHTING

#### General

Install occupancy sensors or wall timers in areas with transient use.

#### Incandescent

Use lower wattage lamps.

Use compact fluorescent lamps.

#### Comments

1st & 2nd Flr. exterior and interior lighting: Observed 8- 100 watt (outsidew) and 6-100watt interior incandescent bulbs-Replace with compact fluorescent lamps. Interior Lighting: Observed T-8, 32watt lamps. Consider installing occupancy sensors in storage, kitchen, bathrooms, and closet areas, if possible. Sensors can range in cost from \$30.00-\$150.00 which comes in ceiling or wall mounted. (see Occupancy Sensor Technical Information)

### HEATING, VENTILATION AND AIR CONDITIONING

#### General

Turn off A/C during unoccupied hours.

#### Comments

Existing 10 wall mounted Fredrich units installed, Observed 2 -HVAC units operating without building occupancy. HVAC thermostat temperature was set at 69 deg. Consider installing programmable thermostats, remove old thermostat.

### WATER HEATING

#### General

Install water heater insulation blanket.

Reduce hot water usage/install flow restrictors.

Insulate tanks/hot water lines.

#### Comments

Observed a 50 gal water heater with 2-3375 watt elements. If utilizing hot water, reduce water temperature; insulate hot water pipe and install water heater blanket. Consider installing water flow restrictors conserving water and reducing water costs.

### BUILDING

#### General

Install weather stripping on doors/windows.

#### Comments

Observed air gaps at exterior threshold doors. Seal all gaps, reducing additional heat gain into cooling space.

BEE # 7634473

9/28/2009

2500543430

TOWN OF LAUD BY THE SEA

4513 N OCEAN DR

LAUD BY SEA, FL 33308

(954) 275-0908

2,520

Operating Hours Per Year

4,200

Hour Per Year AC is on

\$10.00

\$/Kwd Demand Charge

60

Diversity %

\$0.0500

\$/Kwh Energy Charge

12

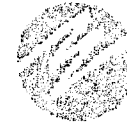
Months On Peak

1

Tons

12,500

AC Btu Rating



FPL

## EER vs Savings

Use this table to determine the savings to your business when you replace inefficient air conditioning systems with more efficient equipment.

### Annual \$ Savings from High Efficiency A/C Cooling

New Unit EER	Estimated Annual Energy Costs of New Unit	Savings if Current EER										
		6	6.5	7	7.5	8	8.5	9	9.5	10	10.5	11
19.5	\$151	\$341	\$303	\$270	\$242	\$218	\$196	\$177	\$159	\$144	\$130	\$117
19	\$155	\$337	\$299	\$266	\$238	\$214	\$192	\$173	\$155	\$140	\$126	\$113
18.5	\$160	\$332	\$295	\$262	\$234	\$209	\$188	\$168	\$151	\$136	\$122	\$109
18	\$164	\$328	\$290	\$258	\$230	\$205	\$183	\$164	\$147	\$131	\$117	\$104
17.5	\$169	\$323	\$285	\$253	\$225	\$200	\$179	\$159	\$142	\$127	\$112	\$100
17	\$174	\$318	\$281	\$248	\$220	\$195	\$174	\$154	\$137	\$122	\$107	\$95
16.5	\$179	\$313	\$275	\$243	\$215	\$190	\$168	\$149	\$132	\$116	\$102	\$89
16	\$185	\$308	\$270	\$237	\$209	\$185	\$163	\$144	\$126	\$111	\$97	\$84
15.5	\$190	\$302	\$264	\$231	\$203	\$179	\$168	\$138	\$120	\$105	\$91	\$78
15	\$197	\$295	\$257	\$225	\$197	\$172	\$150	\$131	\$114	\$98	\$84	\$72
14.5	\$204	\$288	\$251	\$218	\$190	\$165	\$144	\$124	\$107	\$92	\$78	\$65
14	\$211	\$281	\$243	\$211	\$183	\$158	\$136	\$117	\$100	\$84	\$70	\$58
13.5	\$219	\$273	\$235	\$203	\$175	\$150	\$129	\$109	\$92	\$77	\$62	\$50
13	\$227	\$265	\$227	\$195	\$167	\$142	\$120	\$101	\$84	\$68	\$54	\$41
12.5	\$236	\$256	\$218	\$186	\$157	\$133	\$111	\$92	\$75	\$59	\$45	\$32
12	\$246	\$246	\$208	\$176	\$148	\$123	\$101	\$82	\$65	\$49	\$35	\$22
11.5	\$257	\$235	\$197	\$165	\$137	\$112	\$91	\$71	\$54	\$39	\$24	\$12
11	\$268	\$224	\$186	\$153	\$125	\$101	\$79	\$60	\$42	\$27	\$13	\$0
10.5	\$281	\$211	\$173	\$141	\$112	\$88	\$66	\$47	\$30	\$14	\$0	\$0
10	\$295	\$197	\$159	\$127	\$98	\$74	\$52	\$33	\$16	\$0	\$0	\$0
9.5	\$311	\$181	\$143	\$111	\$83	\$58	\$37	\$17	\$0	\$0	\$0	\$0
9	\$328	\$164	\$126	\$94	\$66	\$41	\$19	\$0	\$0	\$0	\$0	\$0
8.5	\$347	\$145	\$107	\$74	\$46	\$22	\$0	\$0	\$0	\$0	\$0	\$0
8	\$369	\$123	\$85	\$53	\$25	\$0	\$0	\$0	\$0	\$0	\$0	\$0

9/28/2009

BEE # 7634473

25005-43430

TOWN OF LAUD BY THE SEA

4513 N OCEAN DR

LAUD BY SEA, FL 33308

(954) 275-0908

**FPL**

## Air, Steam and Hot Water Leaks

*Identifies the Amount of Energy Loss and Expense You Incur With Leaking Equipment*

Hole Diameter (In.)	Air Wasted Bv (cu.ft/yr) @120 PSI	Fuel Wasted Btu/Yr (1 x 10 <sup>6</sup> ) Compressed	KWH/Yr	\$ Cost/Yr
3/8	94,360,800	846.80	248,190	\$12,409.50
1/4	41,900,190	376.00	110,200	\$5,510.00
1/8	10,475,050	94.00	27,550	\$1,377.50
1/16	2,623,480	23.50	6,900	\$345.00
1/32	632,480	5.70	1,660	\$83.00
<b>@110 PSI</b>				
3/8	86,834,000	771.50	226,100	\$11,305.00
1/4	38,580,800	342.90	100,500	\$5,025.00
1/8	3,638,600	85.60	25,100	\$1,255.00
1/16	2,412,200	21.50	6,300	\$315.00
1/32	501,000	5.50	1,600	\$80.00
<b>@100 PSI</b>				
3/8	79,900,000	710.00	208,100	\$10,405.00
1/4	35,500,000	315.60	92,500	\$4,625.00
1/8	8,880,000	78.80	23,100	\$1,155.00
1/16	2,220,000	19.80	5,800	\$290.00
1/32	553,000	4.80	1,400	\$70.00
<b>@90 PSI</b>				
3/8	72,697,000	648.30	190,000	\$9,500.00
1/4	33,133,000	294.10	86,300	\$4,315.00
1/8	8,107,000	72.00	21,100	\$1,055.00
1/16	2,027,000	18.10	5,300	\$265.00
1/32	505,000	4.40	1,300	\$65.00

### Steam

Diameter of Hole	@100 PSIG	\$ Cost./Day	Lb/hr @300PSI	\$ Cost./Day
1/16"	14	\$2.24	33	\$5.28
1/8"	56	\$8.96	132	\$21.12
3/16"	126	\$20.16	297	\$47.52
1/4"	224	\$35.84	528	\$84.48

### Water

Diameter of Hole	Gal/Hr @20 PSIG	\$ Cost./Day	Gal/Hr @ 100 PSIG	\$ Cost./Day
1/16"	20	\$2.76	45	\$6.21
1/8"	80	\$11.04	180	\$24.83
3/16"	180	\$24.83	405	\$55.88
1/4"	320	\$44.15	720	\$99.33

Dollar amounts assume that the cost of gas is \$0.45 per therm and that water is \$2.00 per thousand gallons.

Your prices may vary.

Information source: Handbook of Energy Engineering 2nd edit. By Albert Thurman P.E.&D. Paul Mehca, Ph.D

9/28/2009

25005-43430

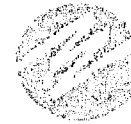
TOWN OF LAUD BY THE SEA

4513 N OCEAN DR

LAUD BY SEA, FL 33308

(954) 275-0908

BEE # 7634473



**FPL**

## Business Energy Evaluation Summary

### Lighting:

	<u>Lamp Tech</u>	<u># of Fixt</u>	<u>Lamps /Fixt</u>	<u>Lamp Type</u>	<u>Ballast Type</u>	<u>Oper Hr/Yr</u>	<u>Kwh Save/Yr</u>	<u>Annual Savings</u>	<u>Kw Saved</u>
Existing	Incandescent	14	1	A-Line Inc.	No Ballast	4200			
Proposed	Compact Fluorescent	14	1	9 Watt	Hardwire	4200	5468	\$ 429.00	1.30
Comments: Exterior and Interior lighting									

Note: KW and kWh savings amounts stated above are estimated only. Actual demand, energy and electric cost savings may vary. Select a vendor from FPL's list of Participating vendors. Savings estimates are for a "typical" customer.

Please see Implementation Cost and Payback Analysis report for details.

9/28/2009

25005-43430

TOWN OF LAUD BY THE SEA

4513 N OCEAN DR

LAUD BY SEA, FL 33308

(954) 275-0908

BEE No. 7634473



**FPL**

## Implementation Cost and Payback Analysis

### Lighting:

	<u>Lamp Tech</u>	<u># of Fixt</u>	<u>Lamps</u>	<u>Lamp Type</u>	<u>Ballast Type</u>	<u>Cost</u>	<u>Savings</u>	<u>Rebate</u>	<u>Payback</u>
Existing	Incandescent	14	1	A-Line Inc.	No Ballast				
Proposed	Compact Fluorescent	14	1	9 Watt	Hardwire	\$ 210.00	\$ 429.00	\$ 28.00	5.04 Months

**Comments:** Exterior and Interior lighting

**Note:** Select a vendor from FPL's list of Participating vendors. The vendor will measure and make all determinations of incentives and cost to install. All incentive amounts will be finalized on the actual installed products and will not be confirmed until post-approval.





9/28/2009

BEE # 7634473

25005-43430

TOWN OF LAUD BY THE SEA

4513 N OCEAN DR

LAUD BY SEA, FL 33308

(954) 275-0908

## General Information

### Where your Energy Dollars Go:

I've also included an Energy Use Report to show where your company is spending most of its energy dollars. It shows which equipment or appliances are consuming the most energy in your facility. You can use this information to better understand your current usage and help you determine which energy-saving measures make the most economic sense for your business.

### Business On Call Program:

FPL's Business On Call program is an easy way to help keep your electric bills down. On Call is a voluntary energy management program that allows us to briefly interrupt service to your central air conditioner during periods of high consumption. To participate, FPL must connect an energy management device to your A/C system. For your part, you'll receive credit on your monthly electric bills (\$2 per ton of cooling each month) from April through October every year you're enrolled in the program. By signing up for On Call, your facility can save \$ each month or \$ annually. (For more information about our Business On Call program, please see the enclosed brochure.)

### Power Monitoring Service:

FPL's Power Monitoring Service is a remote monitoring system designed to let you know within minutes if a momentary interruption, high- or low-voltage event or power outage has occurred at your facility, and when power was restored the system immediately notifies FPL of the event, which can help reduce costly equipment damage and keep your facility operating. Because it's available 24 hours a day, the service is ideal for facility managers who do not staff around the clock or manage multiple facilities. (For more information about this valuable service, please refer to the enclosed Power Monitoring brochure.)

09/28/2009

25005-43430

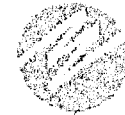
TOWN OF LAUD BY THE SEA

4513 N OCEAN DR

LAUD BY SEA, FL 33308

(954) 275-0908

BEE # 7634473



**FPL**

## Energy Use Summary Report

Equipment	# of Units	Tons/ Unit	Total Tons	kWh/ Month	Peak kW	Est Cost	% of Bill
<b>HVAC</b>							
Wall Unit	10	1.0	10.0	2916	9.5	\$241	46.3%
	Comments: Fredrich wall units						
Package Unit	1	3.0	3.0	882	2.9	\$73	14.0%
	Comments: Bard unit						
<b>Sub Total</b>			<b>13.0</b>	<b>3798</b>	<b>12.4</b>	<b>\$314</b>	<b>60.4%</b>
<b>LIGHTING</b>							
Fluorescent 32 Watt-T8 LM 4ft Lamp	36			781	2.2	\$61	11.7%
	Comments: T-8 Lighting System						
Incandescent A-Line Inc.	14			490	1.4	\$38	7.3%
	Comments: Interior and exterior 100wtt bulbs						
<b>Sub Total</b>				<b>1271</b>	<b>3.6</b>	<b>\$99</b>	<b>19.0%</b>
<b>OTHER EQUIPMENT</b>							
Water Heater	1			1458	3.4	\$107	20.6%
	Comments: 50 Gal waterheater						
<b>Sub Total</b>				<b>1458</b>	<b>3.4</b>	<b>\$107</b>	<b>20.6%</b>

Equipment	# of Units	kWh/ Month	Peak kW	Est Cost	% of Bill
Bill Amount:		6527	19	\$520	100.0%

Electric Charges

0.0500 \$/Kwh  
10.00 \$/Kwd

09/28/2009

BEE # 7634473

25005-43430

TOWN OF LAUD BY THE SEA

4513 N OCEAN DR

LAUD BY SEA, FL 33308

(954) 275-0908

**FPL**

## Energy Use Detail Report

*Analysis of your major equipment's impact on your energy bill*

Equipment	# of Units	Tons/ Unit	Total Tons	Est Kw/Each	Conn Kw	Oper Hrs/Mn	kWh/ Month	Peak Kw	Est Cost	% of Bill
<b>HVAC</b>										
Wall Unit	10	1.0	10.0	1.19	11.90	245	2916	9.5	\$241	46.3%
Comments:	Fredrich wall units									
Package Unit	1	3.0	3.0	3.60	3.60	245	882	2.9	\$73	14.0%
Comments:	Bard unit									
<b>Sub Total</b>			<b>13.0</b>		<b>15.50</b>		<b>3,798.00</b>	<b>12.4</b>	<b>\$314</b>	<b>60.4%</b>
<b>LIGHTING</b>										
Fluorescent 32 Watt-T8 LM 4ft Lamp	36			0.06	2.23	350	781	2.2	\$61	11.7%
Comments:	T-8 Lighting System									
Incandescent A-Line Inc.	14			0.10	1.40	350	490	1.4	\$38	7.3%
Comments:	Interior and exterior 100wtt bulbs									
<b>Sub Total</b>					<b>3.63</b>		<b>1,271.00</b>	<b>3.6</b>	<b>\$99</b>	<b>19.0%</b>
<b>OTHER EQUIPMENT</b>										
Water Heater	1			3.38	3.38	432	1458	3.4	\$107	20.6%
Comments:	50 Gal waterheater									
<b>Sub Total</b>					<b>3.38</b>		<b>1,458.00</b>	<b>3.4</b>	<b>\$107</b>	<b>20.6%</b>
<b>Bill Amount:</b>					<b>22.51</b>		<b>6527</b>	<b>19</b>	<b>\$520</b>	<b>100.0%</b>

### Electric Charges

0.0500 \$/Kwh

10.00 \$/Kwd

9/28/2009

BEE # 7634473

25005-43430

TOWN OF LAUD BY THE SEA

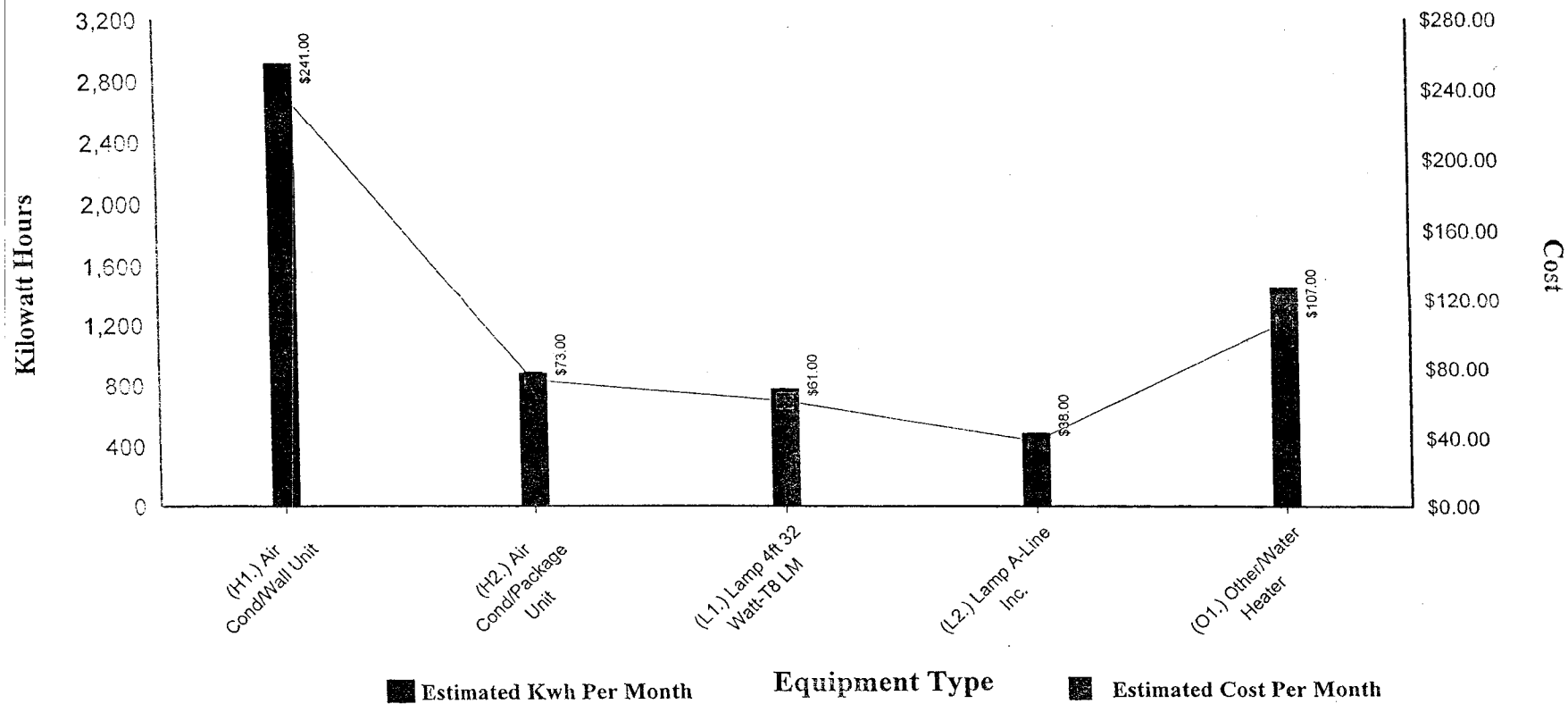
4513 N OCEAN DR

LAUD BY SEA, FL 33308

(954) 275-0908



## Kilowatt Hour Usage & Cost by Equipment



9/28/2009

25005-43430

TOWN OF LAUD BY THE SEA

4513 N OCEAN DR

LAUD BY SEA, FL 33308

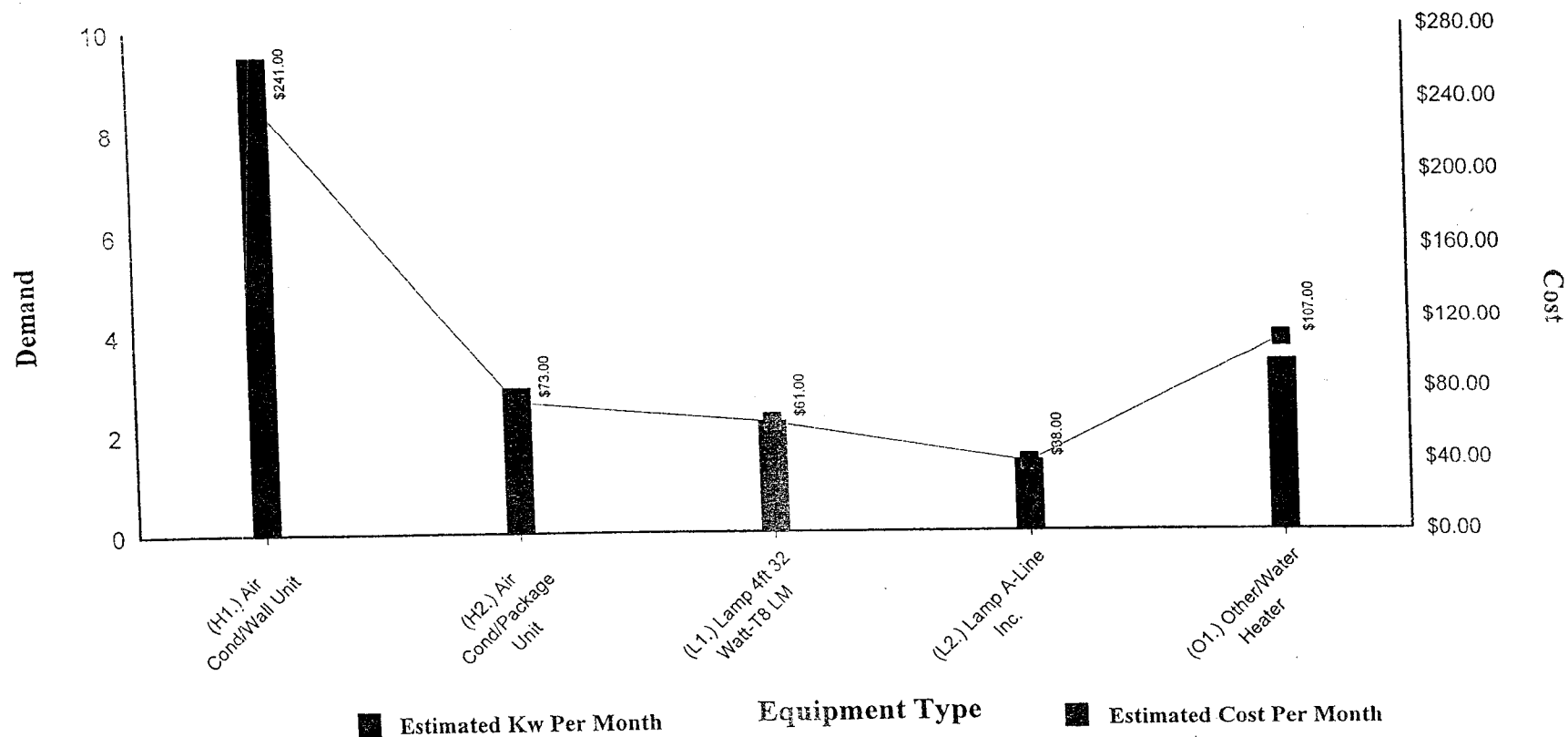
(954) 275-0908

BEE # 7634473



**FPL**

## Demand Usage & Cost by Equipment



BEE # 7634473

9/28/2009

25005-43430

TOWN OF LAUD BY THE SEA

4513 N OCEAN DR

LAUD BY SEA, FL 33308

(954) 275-0908

**FPL**

## 2 Year Usage History Report

*Shows your facility's current 12 month's energy consumption pattern to the previous 12 months*

Billing Date	Days	KW/H per Day	kWh	kWd	Load Factor %	Current Bill	Balance Due
09/03/2009	29	310	8,990	23	56%	\$956.33	\$956.33
08/05/2009	29	268	7,766	0	0%	\$919.52	\$919.52
07/07/2009	32	269	8,595	0	0%	\$1,016.72	\$1,016.72
06/05/2009	30	256	7,673	0	0%	\$908.64	\$908.64
05/06/2009	29	220	6,376	0	0%	\$766.24	\$766.24
04/07/2009	29	200	5,790	0	0%	\$702.35	\$702.35
03/09/2009	31	156	4,843	0	0%	\$588.97	\$584.40
02/06/2009	30	118	3,527	0	0%	\$431.45	\$431.45
01/07/2009	34	117	3,984	0	0%	\$486.15	\$486.15
12/04/2008	31	79	2,443	0	0%	\$305.03	\$305.03
11/03/2008	13	21	277	0	0%	\$37.24	\$52.12
<b>Totals/Avg</b>	<b>29</b>	<b>183</b>	<b>60,264</b>	<b>2</b>	<b>5%</b>	<b>\$7,118.64</b>	

9/28/2009

BEE # 7634473

2500543430

TOWN OF LAUD BY THE SEA

4513 N OCEAN DR

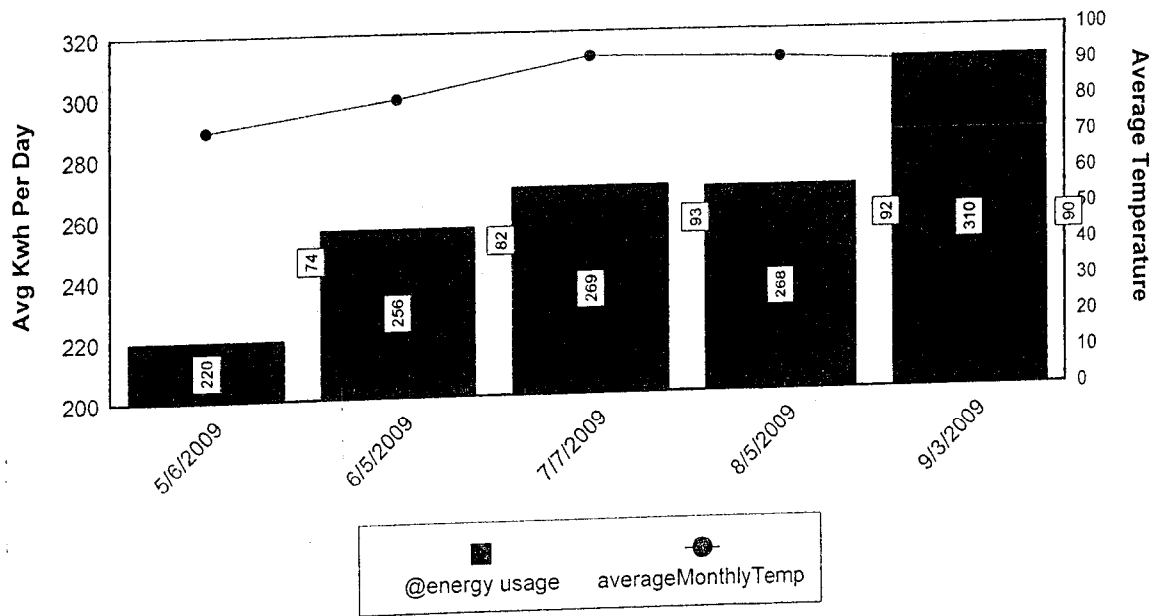
LAUD BY SEA, FL 33308

(954) 275-0908

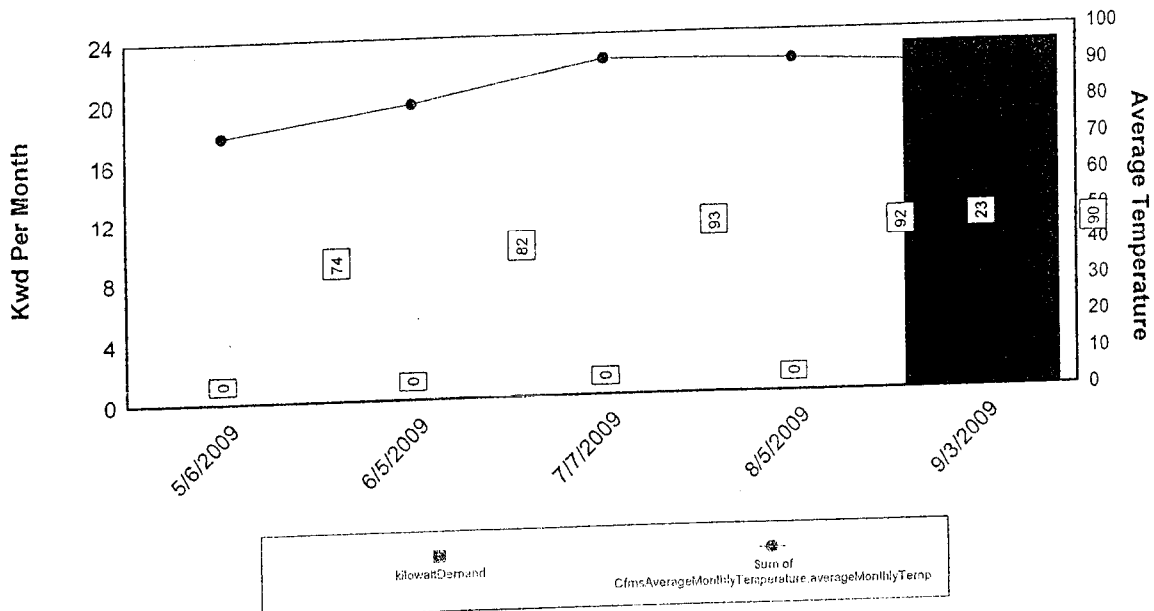


FPL

## Temperature vs KWH



## Temperature vs KWD







9/28/2009

BEE # 9886101

33605-32224  
TOWN OF LAUD BY THE SEA  
4453 N OCEAN DR # TOWN HALL  
LAUD BY SEA, FL 33308  
(954) 776-0576

Re: Business Energy Evaluation

Dear Mr. Prince,

Thank you for the opportunity to perform a Business Energy Evaluation of your facility. This comprehensive analysis of your facility's usage allows us to provide you with valuable information and tools. These resources can be very beneficial in helping you plan for, control and manage your energy expenses.

Based on our findings, we have developed customized recommendations on how your facility can reduce energy costs through FPL's energy-saving measures, programs and incentives. For example, by implementing the energy-saving measures we recommend, you can save as much as \$1,927.17 every year on energy costs.

Itemized projected energy savings:

° <b>Lighting</b>	<u>\$1,909.00</u>
° <b>Insulation</b>	<u>\$18.17</u>
° <b>Window</b>	<u>\$0.00</u>
° <b>A/C</b>	<u>\$0.00</u>
° <b>Motors</b>	<u>\$0.00</u>
° <b>Reflective Roof Coating</b>	<u>\$0.00</u>

In fact, if you install qualifying energy upgrades, you can earn \$283.60 in FPL incentives. But before you implement any of the recommended upgrades, purchase new equipment or start an energy-improvement project, we encourage you to contact FPL or one of our participating independent contractors so we can help you select the most efficient equipment for your budget. From there, your contractor will credit you for the amount of your FPL incentive.

Specific FPL incentives include:

° <b>Lighting</b>	<u>\$265.60</u>
° <b>Insulation</b>	<u>\$18.00</u>
° <b>Window</b>	<u>\$0.00</u>
° <b>A/C</b>	<u>\$0.00</u>
° <b>Reflective Roof Coating</b>	<u>\$0.00</u>

I congratulate you on taking the first step toward energy savings. If you have any questions about the information I've included, please call me at (954) 321-2037 . If you would like more information on any equipment that you may be considering, visit the Business section of our Web site at [www.FPL.com](http://www.FPL.com) and click on Energy Advisor.

Sincerely,

Jocelyn Wright  
Business Accounts Manager

9/28/2009

BEE # 9886101

33605-32224

TOWN OF LAUD BY THE SEA

4453 N OCEAN DR # TOWN HALL

LAUD BY SEA, FL 33308

(954) 776-0576



**FPL**

## Recommendations

### LIGHTING

#### General

Install occupancy sensors or wall timers in areas with transient use.

#### Incandescent

Use lower wattage lamps.

Use ER-type lamps in recessed fixtures.

Use compact fluorescent lamps.

Use fluorescent lamps or LED exit sign retrofit kits.

#### Comments

Observed 100watt incandescent bulbs in main area, bathrooms. The Senior Center and kitchen area has 40 watt fluorescent lamps. Consider installing occupancy sensors in areas such as Kitchen, bathrooms, powder room, storage and closet areas.

### HEATING, VENTILATION AND AIR CONDITIONING

#### General

Maintain temperatures at 75°F for cooling and 68°F for heating.

Clean or replace filters regularly.

Have A/C systems serviced on a regular basis.

#### Energy Investments

Calibrate thermostats.

Install programmable thermostats to schedule units.

Replace unit with high efficiency model on as-fail basis.

#### Comments

The main area HVAC temperature supply measured at 60 deg. . Reseal Trane air handler duct work in AIT room In the Senior Center, replace old thermostat with a programmable thermostat.  
Kitchen Area: Existing MAYtag wall unit -(NOT operating)

### WATER HEATING

#### General

Reduce hot water usage/install flow restrictors.

Insulate tanks/hot water lines.

#### Comments

Insulate hot water pipes and install waterheater blanket to reserve hot water.

### BUILDING

#### General

Close door/windows when using air conditioning.

#### Comments

Observed kitchen door wide opened. This additional heat gain filtering into area has a major impact on the overall cooling space, which in return increases cooling costs.

9/28/2009

BEE # 9886101

3360532224

TOWN OF LAUD BY THE SEA  
4453 N OCEAN DR # TOWN HALL  
LAUD BY SEA, FL 33308  
(954) 776-0576

5,256

Operating Hours Per Year

8,760

Hour Per Year AC is on

\$10.00

\$/Kwd Demand Charge

60

Diversity %

\$0.0500

\$/Kwh Energy Charge

12

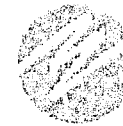
Months On Peak

15

Tons

180,000

AC Btu Rating



FPL

## EER vs Savings

Use this table to determine the savings to your business when you replace inefficient air conditioning systems with more efficient equipment.

### Annual \$ Savings from High Efficiency A/C Cooling

New Unit EER	Estimated Annual Energy Costs of New Unit	Savings if Current EER										
		6	6.5	7	7.5	8	8.5	9	9.5	10	10.5	11
19.5	\$3,534	\$7,950	\$7,067	\$6,310	\$5,654	\$5,079	\$4,573	\$4,122	\$3,720	\$3,357	\$3,029	\$2,730
19	\$3,627	\$7,857	\$6,974	\$6,217	\$5,561	\$4,986	\$4,480	\$4,029	\$3,627	\$3,264	\$2,936	\$2,637
18.5	\$3,725	\$7,759	\$6,876	\$6,119	\$5,463	\$4,888	\$4,382	\$3,931	\$3,529	\$3,166	\$2,838	\$2,539
18	\$3,828	\$7,656	\$6,773	\$6,015	\$5,359	\$4,785	\$4,278	\$3,828	\$3,425	\$3,062	\$2,734	\$2,436
17.5	\$3,937	\$7,547	\$6,663	\$5,906	\$5,250	\$4,676	\$4,169	\$3,719	\$3,316	\$2,953	\$2,625	\$2,327
17	\$4,053	\$7,431	\$6,547	\$5,790	\$5,134	\$4,560	\$4,053	\$3,603	\$3,200	\$2,837	\$2,509	\$2,211
16.5	\$4,176	\$7,308	\$6,425	\$5,667	\$5,011	\$4,437	\$3,930	\$3,480	\$3,077	\$2,714	\$2,386	\$2,088
16	\$4,307	\$7,178	\$6,294	\$5,537	\$4,881	\$4,307	\$3,800	\$3,350	\$2,947	\$2,584	\$2,256	\$1,958
15.5	\$4,445	\$7,039	\$6,155	\$5,398	\$4,742	\$4,168	\$3,661	\$3,211	\$2,808	\$2,445	\$2,117	\$1,819
15	\$4,594	\$6,890	\$6,007	\$5,250	\$4,594	\$4,019	\$3,513	\$3,062	\$2,659	\$2,297	\$1,969	\$1,670
14.5	\$4,752	\$6,732	\$5,849	\$5,091	\$4,435	\$3,861	\$3,354	\$2,904	\$2,501	\$2,138	\$1,810	\$1,512
14	\$4,922	\$6,562	\$5,679	\$4,922	\$4,265	\$3,691	\$3,185	\$2,734	\$2,331	\$1,969	\$1,641	\$1,342
13.5	\$5,104	\$6,380	\$5,497	\$4,739	\$4,083	\$3,509	\$3,002	\$2,552	\$2,149	\$1,786	\$1,458	\$1,160
13	\$5,300	\$6,184	\$5,300	\$4,543	\$3,887	\$3,313	\$2,806	\$2,356	\$1,953	\$1,590	\$1,262	\$964
12.5	\$5,512	\$5,972	\$5,088	\$4,331	\$3,675	\$3,101	\$2,594	\$2,144	\$1,741	\$1,378	\$1,050	\$752
12	\$5,742	\$5,742	\$4,859	\$4,101	\$3,445	\$2,871	\$2,364	\$1,914	\$1,511	\$1,148	\$820	\$522
11.5	\$5,992	\$5,492	\$4,609	\$3,852	\$3,196	\$2,621	\$2,115	\$1,664	\$1,261	\$899	\$571	\$272
11	\$6,264	\$5,220	\$4,337	\$3,579	\$2,923	\$2,349	\$1,842	\$1,392	\$989	\$626	\$298	\$0
10.5	\$6,562	\$4,922	\$4,038	\$3,281	\$2,625	\$2,051	\$1,544	\$1,094	\$691	\$328	\$0	\$0
10	\$6,890	\$4,594	\$3,710	\$2,953	\$2,297	\$1,723	\$1,216	\$766	\$363	\$0	\$0	\$0
9.5	\$7,253	\$4,231	\$3,348	\$2,590	\$1,934	\$1,360	\$853	\$403	\$0	\$0	\$0	\$0
9	\$7,656	\$3,828	\$2,945	\$2,187	\$1,531	\$957	\$450	\$0	\$0	\$0	\$0	\$0
8.5	\$8,106	\$3,378	\$2,494	\$1,737	\$1,081	\$507	\$0	\$0	\$0	\$0	\$0	\$0
8	\$8,613	\$2,871	\$1,988	\$1,230	\$574	\$0	\$0	\$0	\$0	\$0	\$0	\$0

9/28/2009

BEE # 9886101

33605-32224

TOWN OF LAUD BY THE SEA

4453 N OCEAN DR # TOWN HALL

LAUD BY SEA, FL 33308

(954) 776-0576

**FPL**

## Air, Steam and Hot Water Leaks

*Identifies the Amount of Energy Loss and Expense You Incur With Leaking Equipment*

Hole Diameter (In.)	Air Wasted By (cu.ft/yr) @120 PSI	Fuel Wasted Btu/Yr (1 x 10 <sup>6</sup> ) Compressed	KWH/Yr	\$ Cost/Yr
3/8	94,360,800	846.80	248,190	\$12,409.50
1/4	41,900,190	376.00	110,200	\$5,510.00
1/8	10,475,050	94.00	27,550	\$1,377.50
1/16	2,623,480	23.50	6,900	\$345.00
1/32	632,480	5.70	1,660	\$83.00
<b>@110 PSI</b>				
3/8	86,834,000	771.50	226,100	\$11,305.00
1/4	38,580,800	342.90	100,500	\$5,025.00
1/8	3,638,600	85.60	25,100	\$1,255.00
1/16	2,412,200	21.50	6,300	\$315.00
1/32	501,000	5.50	1,600	\$80.00
<b>@100 PSI</b>				
3/8	79,900,000	710.00	208,100	\$10,405.00
1/4	35,500,000	315.60	92,500	\$4,625.00
1/8	8,880,000	78.80	23,100	\$1,155.00
1/16	2,220,000	19.80	5,800	\$290.00
1/32	553,000	4.80	1,400	\$70.00
<b>@90 PSI</b>				
3/8	72,697,000	648.30	190,000	\$9,500.00
1/4	33,133,000	294.10	86,300	\$4,315.00
1/8	8,107,000	72.00	21,100	\$1,055.00
1/16	2,027,000	18.10	5,300	\$265.00
1/32	505,000	4.40	1,300	\$65.00

### Steam

Diameter of Hole	@100 PSIG	\$ Cost./Day	Lb/hr @300PSI	\$ Cost./Day
1/16"	14	\$2.24	33	\$5.28
1/8"	56	\$8.96	132	\$21.12
3/16"	126	\$20.16	297	\$47.52
1/4"	224	\$35.84	528	\$84.48

### Water

	Gal/Hr @20 PSIG	\$ Cost./Day	Gal/Hr @ 100 PSIG	\$ Cost./Day
1/16"	20	\$2.76	45	\$6.21
1/8"	80	\$11.04	180	\$24.83
3/16"	180	\$24.83	405	\$55.88
1/4"	320	\$44.15	720	\$99.33

Dollar amounts assume that the cost of gas is \$0.45 per therm and that water is \$2.00 per thousand gallons.  
Your prices may vary.

Information source: Handbook of Energy Engineering 2nd edit. By Albert Thurman P.E.&D. Paul Mehca, Ph.D

9/28/2009

33605-32224

TOWN OF LAUD BY THE SEA  
4453 N OCEAN DR # TOWN HALL  
LAUD BY SEA, FL 33308  
(954) 776-0576

BEE # 9886101



**FPL**

## Business Energy Evaluation Summary

### Lighting:

	<u>Lamp Tech</u>	<u># of Fixt</u>	<u>Lamps /Fixt</u>	<u>Lamp Type</u>	<u>Ballast Type</u>	<u>Oper Hr/Yr</u>	<u>Kwh Save/Yr</u>	<u>Annual Savings</u>	<u>Kw Saved</u>
Existing	Incandescent	36	1	A-Line Inc.	No Ballast	4200			
Proposed	Compact Fluorescent	36	1	25 Watt	Hardwire	4200	12096	\$ 950.00	2.88
	Comments: Main Area								
Existing	Incandescent	22	1	A-Line Inc.	No Ballast	4200			
Proposed	Compact Fluorescent	22	1	9 Watt	Hardwire	4200	8593	\$ 676.00	2.05
	Comments: Men and Women Bathroom								
Existing	Fluorescent	24	2	40 Watt-T12	E.S. Magnetic	4200			
Proposed	Fluorescent	24	2	32 Watt-T8 LM	Electronic	4200	2923	\$ 228.00	0.70
	Comments:								
Existing	Fluorescent	8	2	40 Watt-T12	E.S. Magnetic	2400			
Proposed	Fluorescent	8	2	32 Watt-T8 LM	Electronic	2400	557	\$ 55.00	0.23
	Comments:								

<b>Insulation:</b>					
<u>Existing</u>	<u>Add</u>	<u>Final</u>		<u>Annual</u>	<u>Kwh</u>
<u>R-Value</u>	<u>R-Value</u>	<u>R-value</u>	<u>Sq Foot</u>	<u>Savings</u>	<u>Savings</u>
0	19	19	120	\$ 18.17	161

Comments Senior Center

Note: KW and kWh savings amounts stated above are estimated only. Actual demand, energy and electric cost savings may vary. Select a vendor from FPL's list of Participating vendors. Savings estimates are for a "typical" customer.

Please see Implementation Cost and Payback Analysis report for details.

9/28/2009

33605-32224

TOWN OF LAUD BY THE SEA  
4453 N OCEAN DR # TOWN HALL  
LAUD BY SEA, FL 33308  
(954) 776-0576

BEE No. 9886101



**FPL**

## Implementation Cost and Payback Analysis

### Lighting:

	<u>Lamp Tech</u>	<u># of Fixt</u>	<u>Lamps</u>	<u>Lamp Type</u>	<u>Ballast Type</u>	<u>Cost</u>	<u>Savings</u>	<u>Rebate</u>	<u>Payback</u>
Existing	Incandescent	36	1	A-Line Inc.	No Ballast				
Proposed	Compact Fluorescent	36	1	25 Watt	Hardwire	\$ 720.00	\$ 950.00	\$ 180.00	6.84 Months
<b>Comments:</b> Main Area									
Existing	Incandescent	22	1	A-Line Inc.	No Ballast				
Proposed	Compact Fluorescent	22	1	9 Watt	Hardwire	\$ 330.00	\$ 676.00	\$ 44.00	5.04 Months
<b>Comments:</b> Men and Women Bathroom									
Existing	Fluorescent	24	2	40 Watt-T12	E.S. Magnetic				
Proposed	Fluorescent	24	2	32 Watt-T8 LM	Electronic	\$ 1,440.00	\$ 228.00	\$ 31.20	6.18 Years
<b>Comments:</b>									
Existing	Fluorescent	8	2	40 Watt-T12	E.S. Magnetic				
Proposed	Fluorescent	8	2	32 Watt-T8 LM	Electronic	\$ 480.00	\$ 55.00	\$ 10.40	8.54 Years
<b>Comments:</b>									

### Insulation: Existing R-Value

Add  
R-Value

Final  
R-value

Sq Foot

Cost

Savings

Rebate

Payback

0

19

19

120

\$ 54.00

\$ 18.17

\$ 18.00

1.98 Years

**Comments:** Senior Center



---

**Note:** Select a vendor from FPL's list of Participating vendors. The vendor will measure and make all determinations of incentives and cost to install. All incentive amounts will be finalized on the actual installed products and will not be confirmed until post-approval.



9/28/2009

BEE # 9386101

33605-32224

TOWN OF LAUD BY THE SEA  
4453 N OCEAN DR # TOWN HALL  
LAUD BY SEA, FL 33308  
(954) 776-0576

## General Information

### Where your Energy Dollars Go:

I've also included an Energy Use Report to show where your company is spending most of its energy dollars. It shows which equipment or appliances are consuming the most energy in your facility. You can use this information to better understand your current usage and help you determine which energy-saving measures make the most economic sense for your business.

### Business On Call Program:

FPL's Business On Call program is an easy way to help keep your electric bills down. On Call is a voluntary energy management program that allows us to briefly interrupt service to your central air conditioner during periods of high consumption. To participate, FPL must connect an energy management device to your A/C system. For your part, you'll receive credit on your monthly electric bills (\$2 per ton of cooling each month) from April through October every year you're enrolled in the program. By signing up for On Call, your facility can save \$30.00 each month or \$210.00 annually. (For more information about our Business On Call program, please see the enclosed brochure.)

### Power Monitoring Service:

FPL's Power Monitoring Service is a remote monitoring system designed to let you know within minutes if a momentary interruption, high- or low-voltage event or power outage has occurred at your facility, and when power was restored the system immediately notifies FPL of the event, which can help reduce costly equipment damage and keep your facility operating. Because it's available 24 hours a day, the service is ideal for facility managers who do not staff around the clock or manage multiple facilities. (For more information about this valuable service, please refer to the enclosed Power Monitoring brochure.)

### Comments:

BEE # 9886101



**FPL**

# Energy Use Summary Report

Equipment	# of Units	Tons/ Unit	Total Tons	kWh/ Month	Peak kW	Est Cost	% of Bill
<b>HVAC</b>							
Split System	1	15.0	15.0	8618	13.7	\$568	55.7%
	Comments: Trane unit : TWE180B30DEL						
Wall Unit	1	2.0	2.0	353	2.0	\$38	3.7%
	Comments: Maytag						
<b>Sub Total</b>			<b>17.0</b>	<b>8971</b>	<b>15.7</b>	<b>\$606</b>	<b>59.5%</b>
<b>LIGHTING</b>							
Incandescent A-Line Inc.	36			1260	3.6	\$99	9.7%
	Comments: Main area						
Incandescent A-Line Inc.	22			770	2.2	\$60	5.9%
	Comments: Men and Women Bathroom						
Fluorescent 40 Watt-T12 4ft Lamp	24			739	2.1	\$58	5.7%
	Comments: Senior Center						
Fluorescent 40 Watt-T12 4ft Lamp	8			141	0.7	\$14	1.4%
	Comments: Kitchen Area						
<b>Sub Total</b>				<b>2910</b>	<b>8.6</b>	<b>\$231</b>	<b>22.7%</b>
<b>OTHER EQUIPMENT</b>							
Water Heater	1			1944	4.5	\$142	13.9%
	Comments: *0 gal tank with 2-4500 elements						

<u>Equipment</u>	<u># of Units</u>	<u>kWh/ Month</u>	<u>Peak kW</u>	<u>Est Cost</u>	<u>% of Bill</u>
Computers	6	700	0.5	\$40	3.9%
Comments: Senior Center Computers					
Sub Total		2644	5.0	\$182	17.9%
Bill Amount:		14525	29	\$1019	100.0%

Electric Charges

0.0500 \$/Kwh  
10.00 \$/Kwd



Equipment	# of Units	Est Kw/Each	Conn Kw	Oper Hrs/Mn	kWh/ Month	Peak Kw	Est Cost	% of Bill
Computers	6	0.27	1.62	432	700	0.5	\$40	3.9%
Comments: Senior Center Computers								
Sub Total			6.12		2,644.00	5.0	\$182	17.9%
Bill Amount:			34.36		14525	29	\$1019	100.0%
<b>Electric Charges</b> 0.0500 \$/Kwh 10.00 \$/Kwd								

9/28/2009

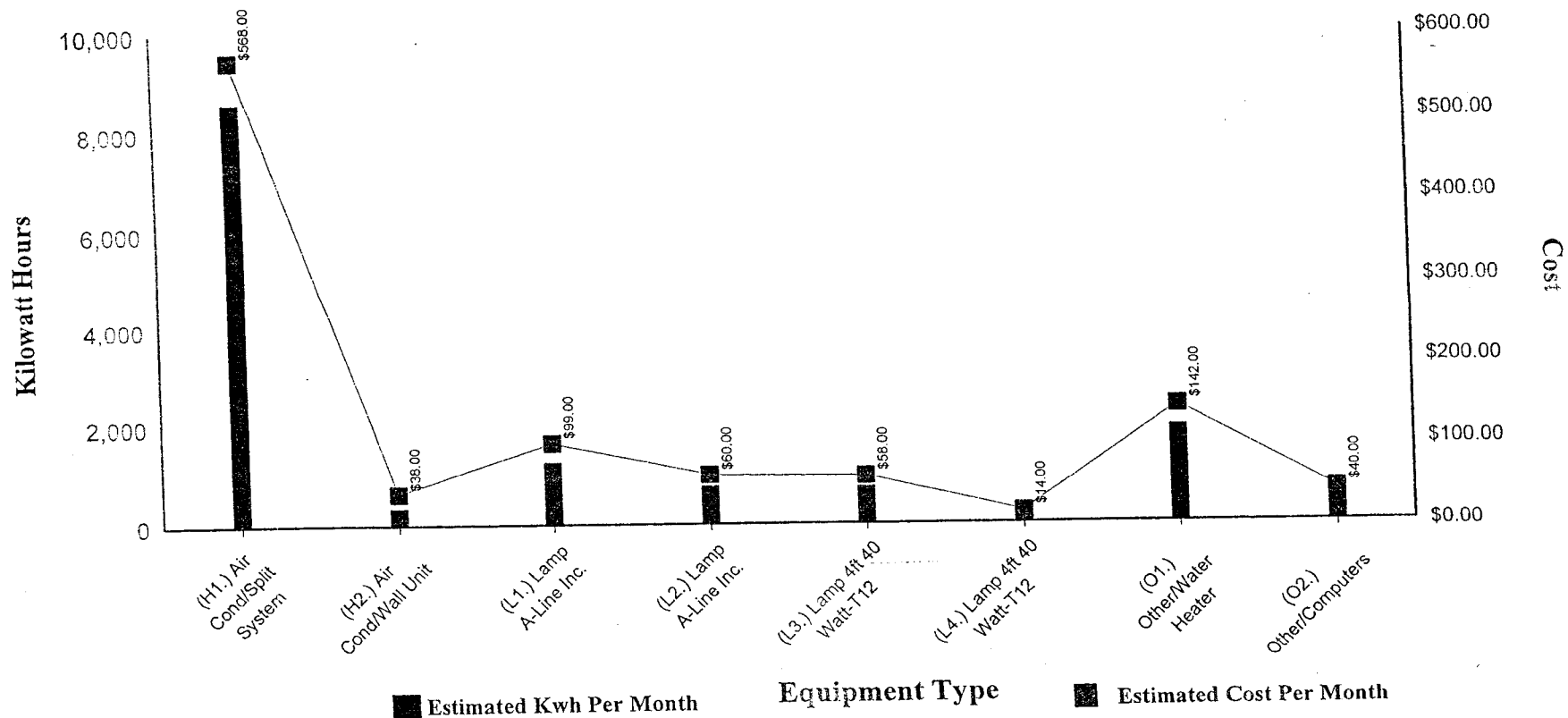
33605-32224

TOWN OF LAUD BY THE SEA  
4453 N OCEAN DR # TOWN HALL  
LAUD BY SEA, FL 33308  
(954) 776-0576

BEE # 9886101



## Kilowatt Hour Usage & Cost by Equipment



9/28/2009

33605-32224

TOWN OF LAUD BY THE SEA

4453 N OCEAN DR # TOWN HALL

LAUD BY SEA, FL 33308

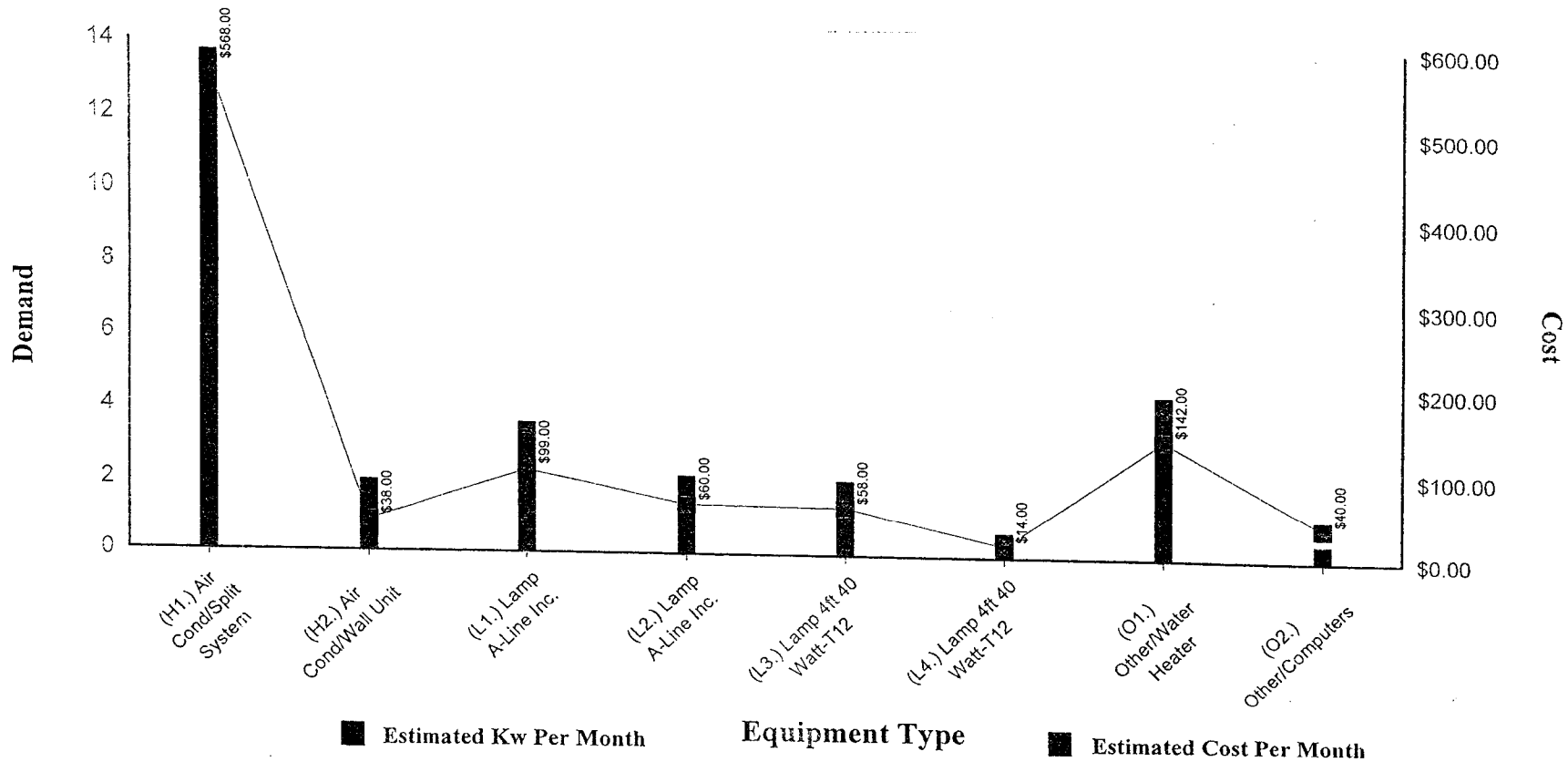
(954) 776-0576

BEE # 9886101



**FPL**

## Demand Usage & Cost by Equipment





9/28/2009

BEE No. 9886101

33605-32224

TOWN OF LAUD BY THE SEA  
4453 N OCEAN DR # TOWN HALL  
LAUD BY SEA, FL 33308  
(954) 776-0576



**FPL**

### Business On Call Program

*Summary of the total credits that you are eligible for as a participant in the Business On Call Program. These credits are applied directly to your bill to reduce your monthly expense.*

Tons	# of Units	Monthly Credit	Annual Credit
15.00	1	\$ 30.00	\$ 210.00
Total Credit:		\$ 30.00	\$ 210.00

9/28/2009

BEE # 9886101

33605-32224

TOWN OF LAUD BY THE SEA

4453 N OCEAN DR # TOWN HALL

LAUD BY SEA, FL 33308

(954) 776-0576



**FPL**

## 2 Year Usage History Report

*Shows your facility's current 12 month's energy consumption pattern to the previous 12 months*

Billing Date	Days	KWH per Day	kWh	kWd	Load Factor %	Current Bill	Balance Due
09/03/2009	29	276	8,005	21	55%	\$859.97	\$859.97
08/05/2009	29	274	7,957	21	54%	\$846.37	\$846.37
07/07/2009	32	244	7,808	21	48%	\$834.42	\$834.42
06/05/2009	30	219	6,558	20	46%	\$725.92	\$725.92
05/06/2009	29	201	5,817	19	44%	\$667.13	\$667.13
04/07/2009	29	186	5,393	21	37%	\$652.55	\$652.55
03/09/2009	31	154	4,789	0	0%	\$582.51	\$577.99
02/06/2009	30	148	4,432	0	0%	\$539.77	\$539.77
01/07/2009	34	170	5,783	0	0%	\$701.49	\$701.49
12/04/2008	31	149	4,612	0	0%	\$567.60	\$567.60
11/03/2008	31	207	6,408	0	0%	\$785.03	\$785.03
10/03/2008	29	255	7,384	0	0%	\$900.79	\$900.79
<b>Totals/Avg</b>	<b>30</b>	<b>207</b>	<b>74,946</b>	<b>10</b>	<b>24%</b>	<b>\$8,663.55</b>	
09/04/2008	30	278	8,331	0	0%	\$1,015.13	\$1,015.13
08/05/2008	11	192	2,115	0	0%	\$258.45	\$273.33
<b>Totals/Avg</b>	<b>21</b>	<b>235</b>	<b>10,446</b>			<b>\$1,273.58</b>	

## Comparison of Average Temperature to Usage

### Min, Max, and Avg Temp, Cooling and Heating Degree Days

Current Billing Period By Cycle Day

Day	Avg				
	Min	Max	Temp	CDD	HDD
Wed-Aug -5-09	82	92	85	20	0
Thu-Aug -6-09	80	90	85	20	0
Fri-Aug -7-09	81	92	86	21	0
Sat-Aug -8-09	82	91	86	21	0
Sun-Aug -9-09	83	92	86	21	0
Mon-Aug -10-09	79	91	84	19	0
Tue-Aug -11-09	78	90	83	18	0
Wed-Aug -12-09	81	91	84	19	0
Thu-Aug -13-09	79	90	84	19	0
Fri-Aug -14-09	82	92	86	21	0
Sat-Aug -15-09	74	86	79	14	0
Sun-Aug -16-09	76	91	84	19	0
Mon-Aug -17-09	80	91	85	20	0
Tue-Aug -18-09	81	92	85	20	0
Wed-Aug -19-09	76	88	83	18	0
Thu-Aug -20-09	82	91	86	21	0
Fri-Aug -21-09	81	92	86	21	0
Sat-Aug -22-09	78	91	82	17	0
Sun-Aug -23-09	79	90	82	17	0
Mon-Aug -24-09	78	89	82	17	0
Tue-Aug -25-09	78	91	84	19	0
Wed-Aug -26-09	79	90	84	19	0
Thu-Aug -27-09	78	92	84	19	0
Fri-Aug -28-09	81	92	85	20	0
Sat-Aug -29-09	81	94	85	20	0
Sun-Aug -30-09	79	91	84	19	0
Mon-Aug -31-09	80	91	84	19	0
Tue-Sep -1-09	77	89	81	16	0
Wed-Sep -2-09	78	88	80	15	0
Thu-Sep -3-09	77	91	80	15	0

Last Month Billing Period This Year

Day	Avg				
	Min	Max	Temp	CDD	HDD
Sun-Jul -5-09	78	91	84	19	0
Mon-Jul -6-09	79	94	86	21	0
Tue-Jul -7-09	80	95	87	22	0
Wed-Jul -8-09	81	93	85	20	0
Thu-Jul -9-09	79	92	85	20	0
Fri-Jul -10-09	79	89	84	19	0
Sat-Jul -11-09	77	91	84	19	0
Sun-Jul -12-09	77	92	84	19	0
Mon-Jul -13-09	80	91	84	19	0
Tue-Jul -14-09	79	91	85	20	0
Wed-Jul -15-09	82	92	85	20	0
Thu-Jul -16-09	81	93	86	21	0
Fri-Jul -17-09	82	93	87	22	0
Sat-Jul -18-09	80	93	85	20	0
Sun-Jul -19-09	78	93	84	19	0
Mon-Jul -20-09	74	90	81	16	0
Tue-Jul -21-09	74	90	82	17	0
Wed-Jul -22-09	80	92	85	20	0
Thu-Jul -23-09	81	90	83	18	0
Fri-Jul -24-09	78	90	84	19	0
Sat-Jul -25-09	74	86	80	15	0
Sun-Jul -26-09	75	91	80	15	0
Mon-Jul -27-09	77	90	83	18	0
Tue-Jul -28-09	80	90	84	19	0
Wed-Jul -29-09	79	90	82	17	0
Thu-Jul -30-09	79	87	83	18	0
Fri-Jul -31-09	80	91	85	20	0
Sat-Aug -1-09	81	90	85	20	0
Sun-Aug -2-09	82	90	86	21	0
Mon-Aug -3-09	83	92	86	21	0
Tue-Aug -4-09	83	92	86	21	0

Same Billing Period Last Year

Day	Avg				
	Min	Max	Temp	CDD	HDD
Tue-Aug -5-08	79	91	84	19	0
Wed-Aug -6-08	81	91	85	20	0
Thu-Aug -7-08	80	93	84	19	0
Fri-Aug -8-08	80	89	83	18	0
Sat-Aug -9-08	78	92	83	18	0
Sun-Aug -10-08	75	88	80	15	0
Mon-Aug -11-08	77	89	82	17	0
Tue-Aug -12-08	75	87	80	15	0
Wed-Aug -13-08	75	93	84	19	0
Thu-Aug -14-08	74	91	80	15	0
Fri-Aug -15-08	75	91	83	18	0
Sat-Aug -16-08	79	92	85	20	0
Sun-Aug -17-08	80	90	84	19	0
Mon-Aug -18-08	74	83	78	13	0
Tue-Aug -19-08	77	86	81	16	0
Wed-Aug -20-08	79	88	82	17	0
Thu-Aug -21-08	77	90	81	16	0
Fri-Aug -22-08	74	90	81	16	0
Sat-Aug -23-08	78	89	83	18	0
Sun-Aug -24-08	77	89	83	18	0
Mon-Aug -25-08	77	90	83	18	0
Tue-Aug -26-08	80	91	83	18	0
Wed-Aug -27-08	79	91	85	20	0
Thu-Aug -28-08	81	90	85	20	0
Fri-Aug -29-08	80	89	84	19	0
Sat-Aug -30-08	81	86	83	18	0
Sun-Aug -31-08	80	88	84	19	0
Mon-Sep -1-08	81	91	85	20	0
Tue-Sep -2-08	80	90	84	19	0
Wed-Sep -3-08	81	89	84	19	0

	Curr	Prev	Prev Yr
TOTAL HEATING DEGREE	0	0	0
TOTAL COOLING DEGREE	564	595	536
DAYS 92 AND ABOVE	9	13	4
DAYS BELOW 45	0	0	0

	Curr	Prev Mn	Prev Yr
HIGHEST TEMPERATURE	94	95	93
AVERAGE LOW TEMPERATURE	79	79	78
AVERAGE HIGH TEMPERATURE	91	91	90
LOWEST TEMPERATURE	74	74	74
AVERAGE OVERALL TEMP	84	84	83

9/28/2009

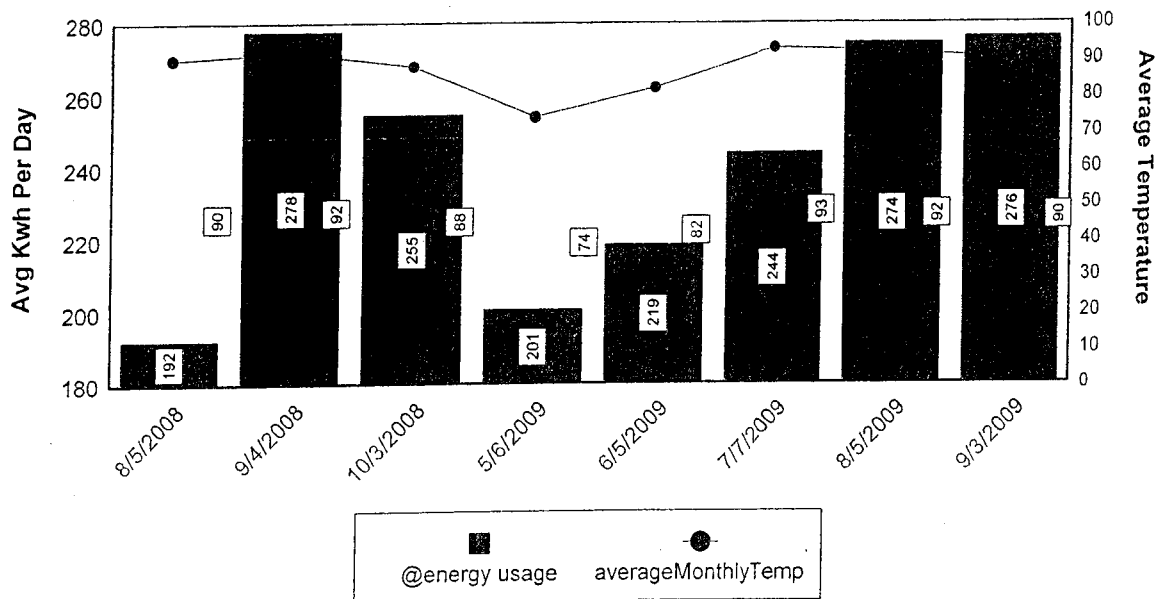
BEE # 9886101

3360532224

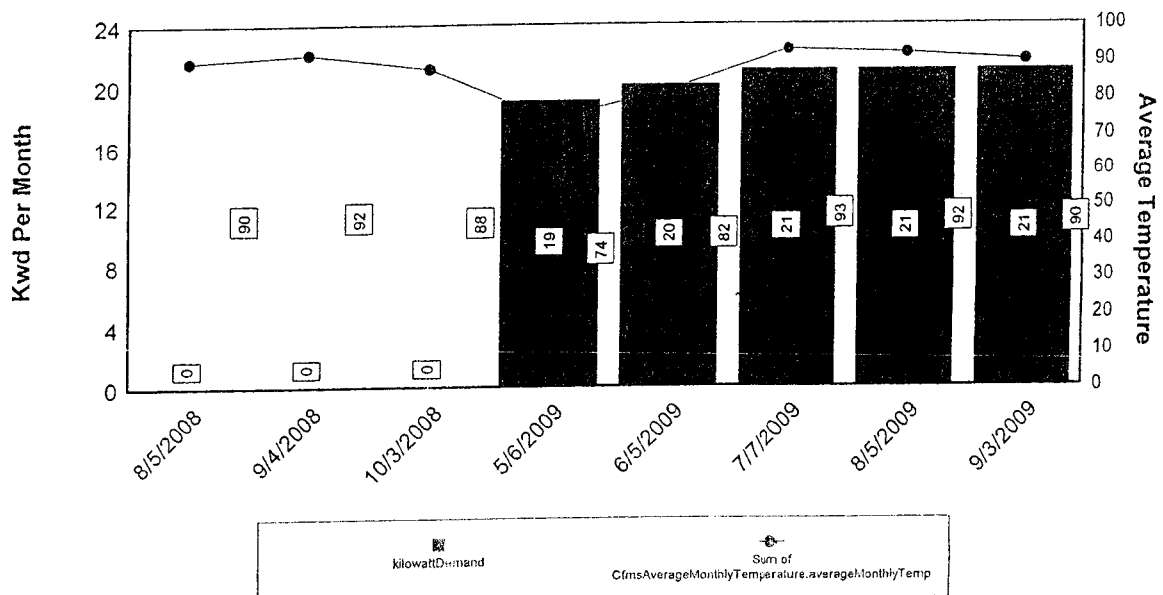
TOWN OF LAUD BY THE SEA  
4453 N OCEAN DR # TOWN HALL  
LAUD BY SEA, FL 33308  
(954) 776-0576



## Temperature vs KWH



## Temperature vs KWD



9/28/2009

33605-32224

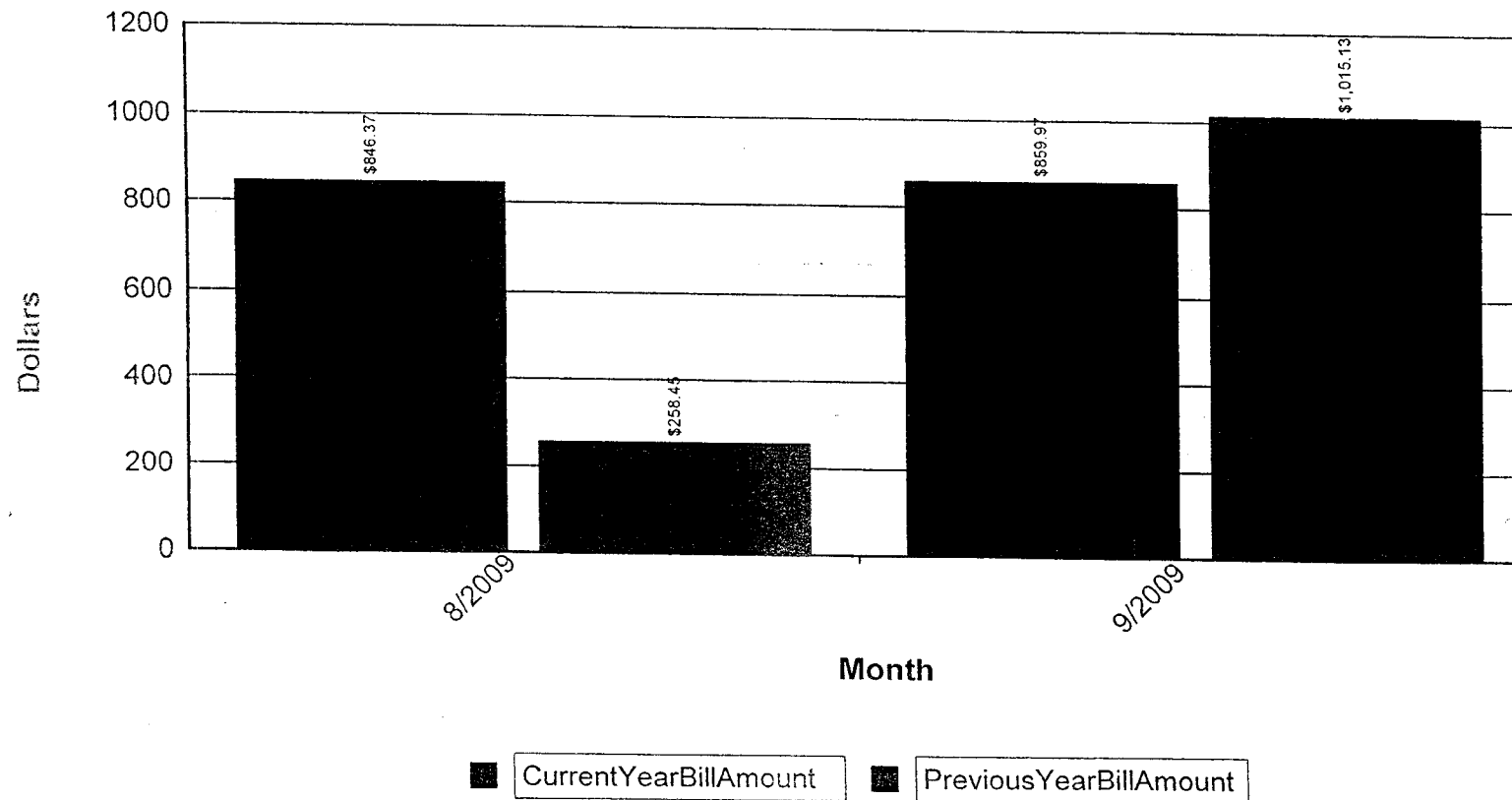
TOWN OF LAUD BY THE SEA  
4453 N OCEAN DR # TOWN HALL  
LAUD BY SEA, FL 33308  
(954) 776-0576

BEE # 9886101



**FPL**

## Bill Amount Comparison



9/28/2009

33605-32224

TOWN OF LAUD BY THE SEA

4453 N OCEAN DR # TOWN HALL

LAUD BY SEA, FL 33308

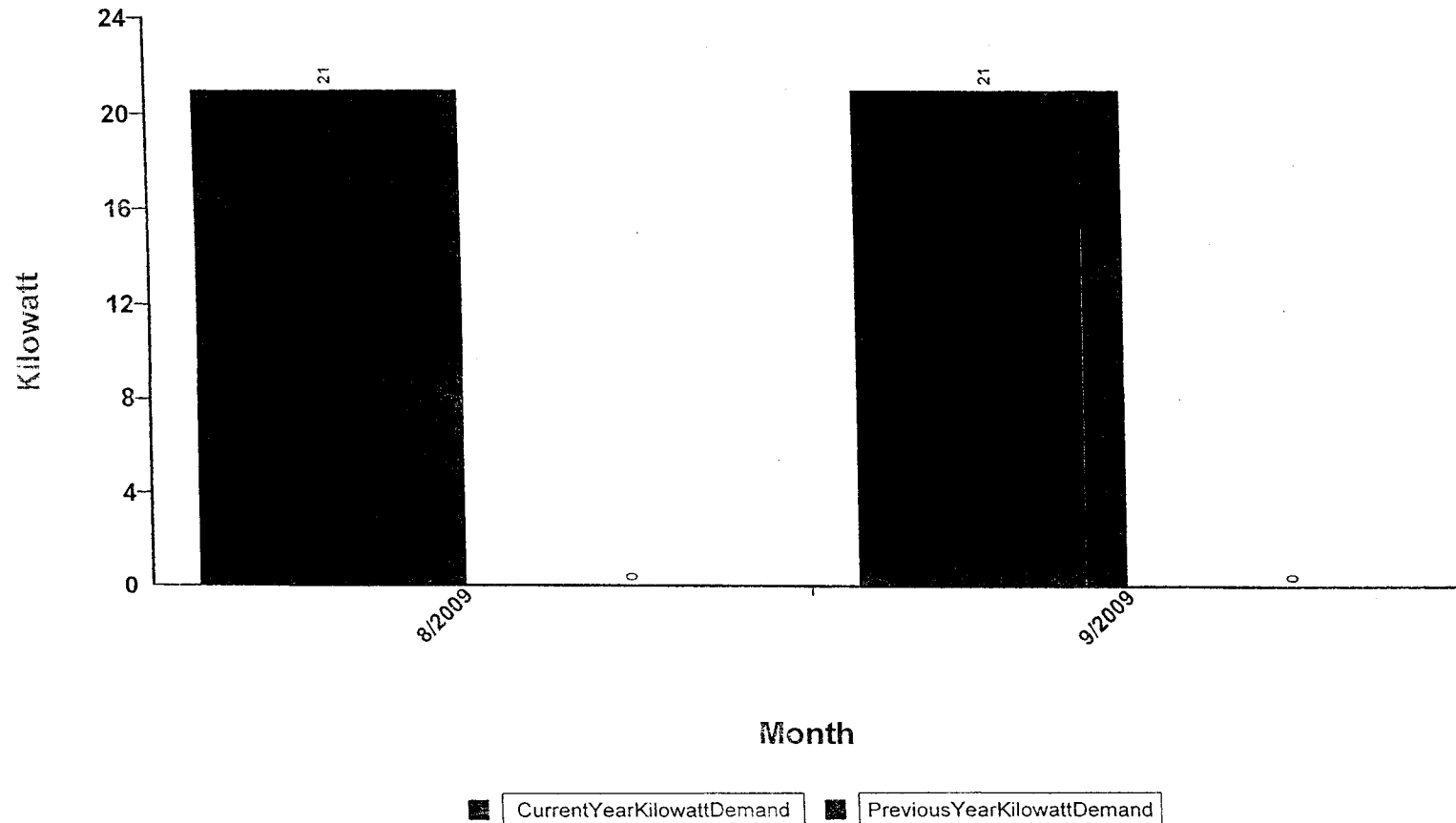
(954)776-0576

BEE # 9886101



**FPL**

## Monthly Demand Comparison



9/28/2009

33605-32224

TOWN OF LAUD BY THE SEA

4453 N OCEAN DR # TOWN HALL

LAUD BY SEA, FL 33308

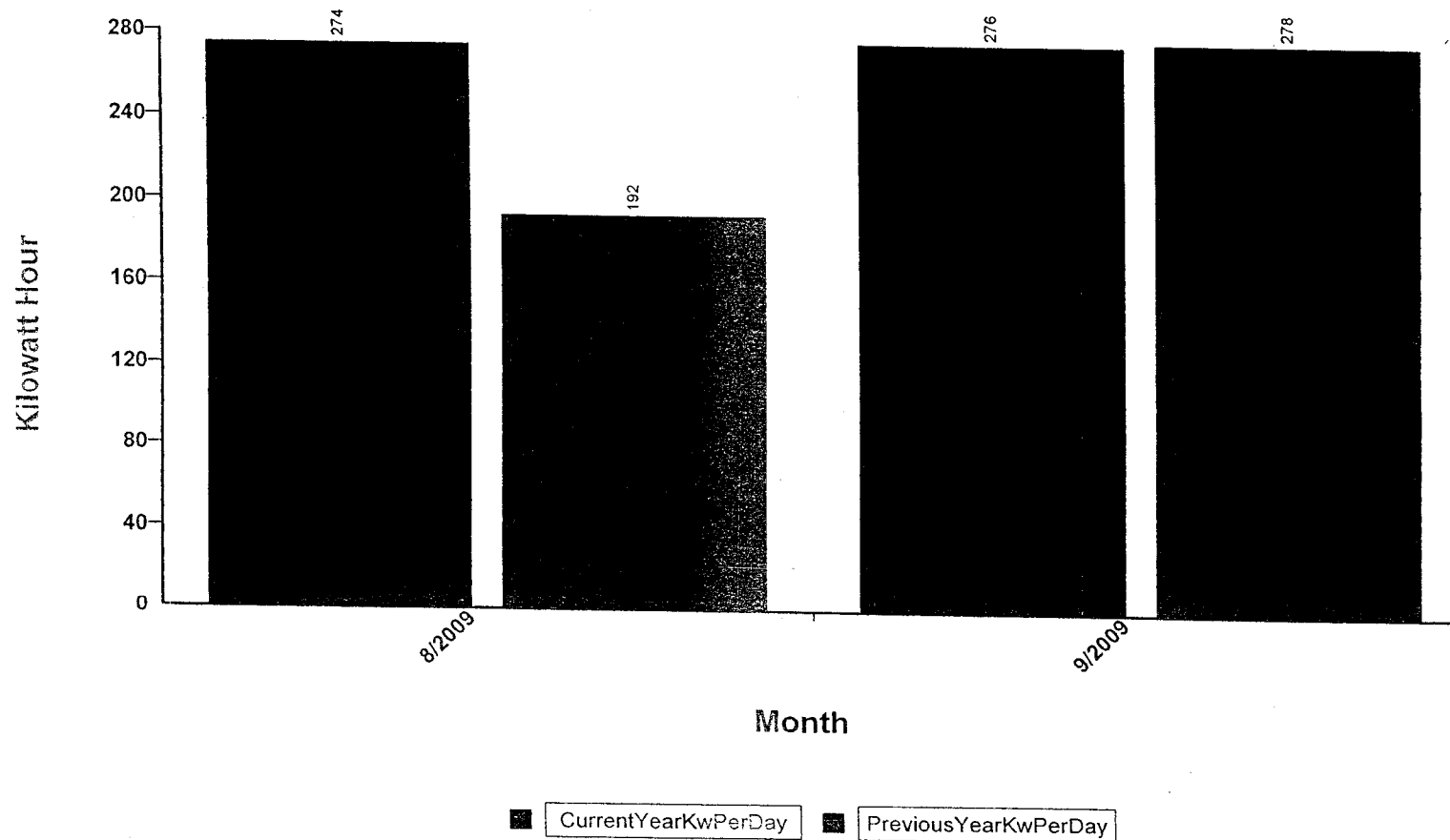
(954)776-0576

BEE #9886101



**FPL**

## KWH Per Day Comparison







9/29/2009

BEE # 7331991

51460-99451

TOWN OF LAUD BY THE SEA

4509 N OCEAN DR

LAUD BY SEA, FL 33308

(954) 776-0576

Re: Business Energy Evaluation

Dear Mr. Prince,

Thank you for the opportunity to perform a Business Energy Evaluation of your facility. This comprehensive analysis of your facility's usage allows us to provide you with valuable information and tools. These resources can be very beneficial in helping you plan for, control and manage your energy expenses.

Based on our findings, we have developed customized recommendations on how your facility can reduce energy costs through FPL's energy-saving measures, programs and incentives. For example, by implementing the energy-saving measures we recommend, you can save as much as \$1,712.00 every year on energy costs.

Itemized projected energy savings:

° <b>Lighting</b>	<u>\$1,712.00</u>
° <b>Insulation</b>	<u>\$0.00</u>
° <b>Window</b>	<u>\$0.00</u>
° <b>A/C</b>	<u>\$0.00</u>
° <b>Motors</b>	<u>\$0.00</u>
° <b>Reflective Roof Coating</b>	<u>\$0.00</u>

In fact, if you install qualifying energy upgrades, you can earn \$52.05 in FPL incentives. But before you implement any of the recommended upgrades, purchase new equipment or start an energy-improvement project, we encourage you to contact FPL or one of our participating independent contractors so we can help you select the most efficient equipment for your budget. From there, your contractor will credit you for the amount of your FPL incentive.

Specific FPL incentives include:

° <b>Lighting</b>	<u>\$52.05</u>
° <b>Insulation</b>	<u>\$0.00</u>
° <b>Window</b>	<u>\$0.00</u>
° <b>A/C</b>	<u>\$0.00</u>
° <b>Reflective Roof Coating</b>	<u>\$0.00</u>

Utilized address for Police Station

I congratulate you on taking the first step toward energy savings. If you have any questions about the information I've included, please call me at (954) 321-2037 . If you would like more information on any equipment that you may be considering, visit the Business section of our Web site at [www.FPL.com](http://www.FPL.com) and click on Energy Advisor.

Sincerely,

Jocelyn Wright  
Business Accounts Manager

9/29/2009

BEE # 7331991

51460-99451

TOWN OF LAUD BY THE SEA

4509 N OCEAN DR

LAUD BY SEA, FL 33308

(954) 776-0576

**FPL**

## Recommendations

### LIGHTING

#### General

Turn off lights when not in use.

Install occupancy sensors or wall timers in areas with transient use.

#### Incandescent

Use lower wattage lamps.

Use fluorescent lamps or LED exit sign retrofit kits.

#### Fluorescent

Low Mercury T-8 lamps and electronic ballast can qualify for an increased FPL incentive.

#### Comments

Existing 34 standard Energy Saving lamps and ballast. In the office space, observed 40watt old standard lighting. Consider upgrading to 32watt, T-8 lamp system with electronic ballast. Replace 100watt standard incandescent lamps with compact FL.

### HEATING, VENTILATION AND AIR CONDITIONING

#### General

Maintain temperatures at 75°F for cooling and 68°F for heating.

Clean Condenser and/or Evaporator Coils.

Set up temperatures during unoccupied hours.

Clean or replace filters regularly.

Have A/C systems serviced on a regular basis.

#### Energy Investments

Install programmable thermostats to schedule units.

Replace unit with high efficiency model on as-fail basis.

#### Comments

Observed HVAC filters needed changing. Consider repacing old thermostat with programmable thermostat with lock box. The temperature at the exterior door thresh hole measured at 82 deg at the air gap. This means, 82 deg of additional heat gain is filtering into cooling space. The additional heat gain will impact cooling costs. Clean HVAC coils.

### BUILDING

#### General

Install weather stripping on doors/windows.

Adjust doors/windows for proper fit.

#### Comments

Observed many air gaps in ceiling and exterior doors which has a major impact on cooling costs. Seal all air gaps, preventing heat gain into cooling space.

9/29/2009

BEE # 7331991

51460-99451

TOWN OF LAUD BY THE SEA

4509 N OCEAN DR

LAUD BY SEA, FL 33308

(954) 776-0576

**FPL****Air, Steam and Hot Water Leaks***Identifies the Amount of Energy Loss and Expense You Incur With Leaking Equipment*

Hole Diameter (In.)	Air Wasted Bv (cu.ft/yr) @120 PSI	Fuel Wasted Btu/Yr (1 x 10 <sup>6</sup> ) Compressed	KWH/Yr	\$ Cost/Yr
3/8	94,360,800	846.80	248,190	\$22,337.10
1/4	41,900,190	376.00	110,200	\$9,918.00
1/8	10,475,050	94.00	27,550	\$2,479.50
1/16	2,623,480	23.50	6,900	\$621.00
1/32	632,480	5.70	1,660	\$149.40
<b>@110 PSI</b>				
3/8	86,834,000	771.50	226,100	\$20,349.00
1/4	38,580,800	342.90	100,500	\$9,045.00
1/8	3,638,600	85.60	25,100	\$2,259.00
1/16	2,412,200	21.50	6,300	\$567.00
1/32	501,000	5.50	1,600	\$144.00
<b>@100 PSI</b>				
3/8	79,900,000	710.00	208,100	\$18,729.00
1/4	35,500,000	315.60	92,500	\$8,325.00
1/8	8,880,000	78.80	23,100	\$2,079.00
1/16	2,220,000	19.80	5,800	\$522.00
1/32	553,000	4.80	1,400	\$126.00
<b>@90 PSI</b>				
3/8	72,697,000	648.30	190,000	\$17,100.00
1/4	33,133,000	294.10	86,300	\$7,767.00
1/8	8,107,000	72.00	21,100	\$1,899.00
1/16	2,027,000	18.10	5,300	\$477.00
1/32	505,000	4.40	1,300	\$117.00

**Steam**

Diameter of Hole	@100 PSIG	\$ Cost./Day	Lb/hr @300PSI	\$ Cost./Day
1/16"	14	\$2.24	33	\$5.28
1/8"	56	\$8.96	132	\$21.12
3/16"	126	\$20.16	297	\$47.52
1/4"	224	\$35.84	528	\$84.48

**Water**

	Gal/Hr @20 PSIG	\$ Cost./Day	Gal/Hr @100 PSIG	\$ Cost./Day
1/16"	20	\$2.76	45	\$6.21
1/8"	80	\$11.04	180	\$24.83
3/16"	180	\$24.83	405	\$55.88
1/4"	320	\$44.15	720	\$99.33

Dollar amounts assume that the cost of gas is \$0.45 per therm and that water is \$2.00 per thousand gallons.

Your prices may vary.

Information source: Handbook of Energy Engineering 2nd edit. By Albert Thurman P.E.&D. Paul Mehca, Ph.D

9/29/2009

BEE # 7331991

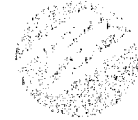
51460-99451

TOWN OF LAUD BY THE SEA

4509 N OCEAN DR

LAUD BY SEA, FL 33308

(954) 776-0576



**FPL**

## Business Energy Evaluation Summary

### Lighting:

	Lamp Tech	# of Fixt	Lamps /Fixt	Lamp Type	Ballast Type	Oper Hr/Yr	Kwh Save/Yr	Annual Savings	Kw Saved
Existing	Fluorescent	15	4	34 Watt-T12	E.S. Magnetic	8640			
Proposed	Fluorescent	15	3	34 Watt-T12	Electronic	8640	11016	\$ 992.00	1.28
	Comments: Police Station								
Existing	Fluorescent	8	4	40 Watt-T12	E.S. Magnetic	8640			
Proposed	Fluorescent	8	3	32 Watt-T8 LM	Electronic	8640	6497	\$ 585.00	0.75
	Comments: Police Station								
Existing	Fluorescent	4	2	40 Watt-T12	E.S. Magnetic	8640			
Proposed	Fluorescent	4	2	32 Watt-T8 LM	Elec-Tandem	8640	1278	\$ 115.00	0.15
	Comments: Police Station								
Existing	Incandescent	1	1	A-Line Inc.	No Ballast	2400			
Proposed	Compact Fluorescent	1	1	9 Watt	Hardwire	2400	223	\$ 20.00	0.09
	Comments: Bathroom								

Note: KW and kWh savings amounts stated above are estimated only. Actual demand, energy and electric cost savings may vary. Select a vendor from FPL's list of Participating vendors. Savings estimates are for a "typical" customer.

Please see Implementation Cost and Payback Analysis report for details.

(954) 776-0576

**FPL**

**Comments:** Bathroom

(954) 776-0576

**FPL**

## Implementation Cost and Payback Analysis

<u>Lamp Tech</u>	<u># of Fixt</u>	<u>Lamps</u>	<u>Lamp Type</u>	<u>Ballast Type</u>	<u>Cost</u>	<u>Savings</u>	<u>Rebate</u>	<u>Payback</u>
Fluorescent	15	4	34 Watt-T12	E.S. Magnetic				
Fluorescent	15	3	34 Watt-T12	Electronic	\$ 900.00	\$ 992.00	\$ 29.25	10.56 Months
Comments: Police Station								
Fluorescent	8	4	40 Watt-T12	E.S. Magnetic				
Fluorescent	8	3	32 Watt-T8 LM	Electronic	\$ 480.00	\$ 585.00	\$ 15.60	9.48 Months
Comments: Police Station								
Fluorescent	4	2	40 Watt-T12	E.S. Magnetic				
Fluorescent	4	2	32 Watt-T8 LM	Elec-Tandem	\$ 200.00	\$ 115.00	\$ 5.20	1.69 Years
Comments: Police Station								
Incandescent	1	1	A-Line Inc.	No Ballast				
Impact Fluorescent	1	1	9 Watt	Hardwire	\$ 15.00	\$ 20.00	\$ 2.00	7.8 Months
Comments: Bathroom								

**Note:** Select a vendor from FPL's list of Participating vendors. The vendor will measure and make all determinations of incentives and cost to install. All incentive amounts will be finalized on the actual installed products and will not be confirmed until post-approval.

09/29/2009

51460-99451

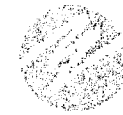
TOWN OF LAUD BY THE SEA

4509 N OCEAN DR

LAUD BY SEA, FL 33308

(954) 776-0576

BEE # 7331991



**FPL**

## Energy Use Summary Report

Equipment	# of Units	kWh/ Month	Peak kW	Est Cost	% of Bill
<b>LIGHTING</b>					
Fluorescent 34 Watt-T12 4ft Lamp	15 Comments: Police Station	1555	2.2	\$140	54.7%
Fluorescent 40 Watt-T12 4ft Lamp	8 Comments: Police Station	1014	1.4	\$91	35.5%
Fluorescent 40 Watt-T12 4ft Lamp	4 Comments: Police Station	253	0.4	\$23	9.0%
Incandescent A-Line Inc.	1 Comments: bathroom	20	0.1	\$2	0.8%
<b>Sub Total</b>		<b>2842</b>	<b>4.1</b>	<b>\$256</b>	<b>100.0%</b>
<b>Bill Amount:</b>		<b>2842</b>	<b>4</b>	<b>\$256</b>	<b>100.0%</b>

### Electric Charges

0.0900 \$/Kwh  
.00 \$/Kwd



09/29/2009

51460-99451

TOWN OF LAUD BY THE SEA

4509 N OCEAN DR

LAUD BY SEA, FL 33308

(954) 776-0576

BEE # 7331991



**FPL**

## Energy Use Detail Report

*Analysis of your major equipment's impact on your energy bill*

Equipment	# of Units	Est Kw/Each	Conn Kw	Oper Hrs/Mn	kWh/ Month	Peak Kw	Est Cost	% of Bill
<b>LIGHTING</b>								
Fluorescent 34 Watt-T12 4ft Lamp	15	0.14	2.16	720	1555	2.2	\$140	54.7%
Comments: Police Station								
Fluorescent 40 Watt-T12 4ft Lamp	8	0.18	1.41	720	1014	1.4	\$91	35.5%
Comments: Police Station								
Fluorescent 40 Watt-T12 4ft Lamp	4	0.09	0.35	720	253	0.4	\$23	9.0%
Comments: Police Station								
Incandescent A-Line Inc.	1	0.10	0.10	200	20	0.1	\$2	0.8%
Comments: bathroom								
<b>Sub Total</b>			<b>4.02</b>		<b>2,842.00</b>	<b>4.1</b>	<b>\$256</b>	<b>100.0%</b>
<b>Bill Amount:</b>			<b>4.02</b>		<b>2842</b>	<b>4</b>	<b>\$256</b>	<b>100.0%</b>

### Electric Charges

0.0900 \$/Kwh

.00 \$/Kwd

9/29/2009

BEE # 7331991

51460-99451

TOWN OF LAUD BY THE SEA

4509 N OCEAN DR

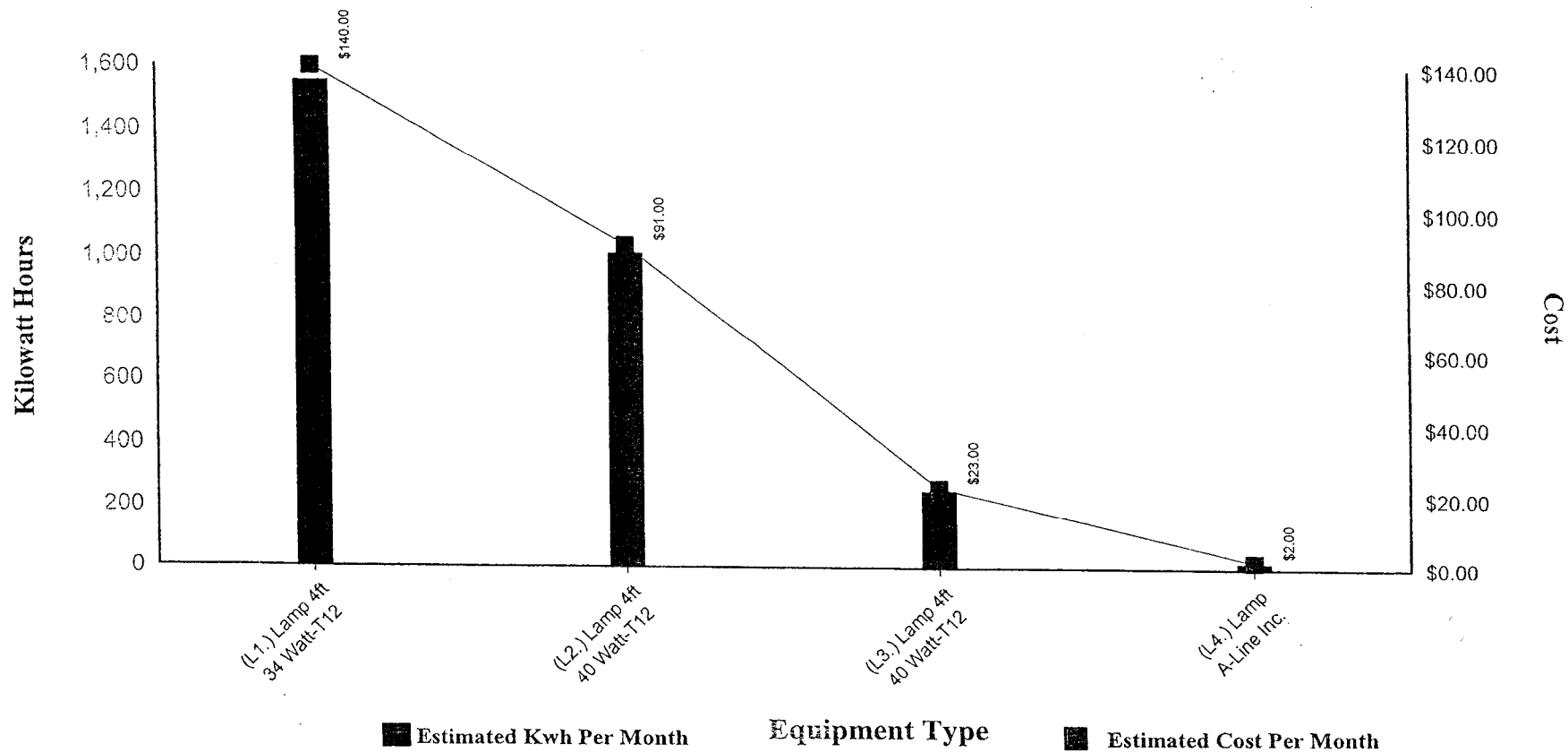
LAUD BY SEA, FL 33308

(954) 776-0576



**FPL**

## Kilowatt Hour Usage & Cost by Equipment





9/30/2009

BEE # 3107923

85813-46122

TOWN OF LAUD BY THE SEA  
4453 N OCEAN DR # CITY HALL  
LAUD BY SEA, FL 33308  
(954) 321-2161

Re: Business Energy Evaluation

Dear Mr. Prince,

Thank you for the opportunity to perform a Business Energy Evaluation of your facility. This comprehensive analysis of your facility's usage allows us to provide you with valuable information and tools. These resources can be very beneficial in helping you plan for, control and manage your energy expenses.

Based on our findings, we have developed customized recommendations on how your facility can reduce energy costs through FPL's energy-saving measures, programs and incentives. For example, by implementing the energy-saving measures we recommend, you can save as much as \$1,051.27 every year on energy costs.

Itemized projected energy savings:

° <b>Lighting</b>	<u>\$750.00</u>
° <b>Insulation</b>	<u>\$301.27</u>
° <b>Window</b>	<u>\$0.00</u>
° <b>A/C</b>	<u>\$0.00</u>
° <b>Motors</b>	<u>\$0.00</u>
° <b>Reflective Roof Coating</b>	<u>\$0.00</u>

In fact, if you install qualifying energy upgrades, you can earn \$437.40 in FPL incentives. But before you implement any of the recommended upgrades, purchase new equipment or start an energy-improvement project, we encourage you to contact FPL or one of our participating independent contractors so we can help you select the most efficient equipment for your budget. From there, your contractor will credit you for the amount of your FPL incentive.

Specific FPL incentives include:

° <b>Lighting</b>	<u>\$62.40</u>
° <b>Insulation</b>	<u>\$375.00</u>
° <b>Window</b>	<u>\$0.00</u>
° <b>A/C</b>	<u>\$0.00</u>
° <b>Reflective Roof Coating</b>	<u>\$0.00</u>

I congratulate you on taking the first step toward energy savings. If you have any questions about the information I've included, please call me at (954) 321-2037. If you would like more information on any equipment that you may be considering, visit the Business section of our Web site at [www.FPL.com](http://www.FPL.com) and click on Energy Advisor.

Sincerely,

Jocelyn Wright  
Business Accounts Manager

9/30/2009

BEE # 3107923

85813-46122

TOWN OF LAUD BY THE SEA

4453 N OCEAN DR # CITY HALL

LAUD BY SEA, FL 33308

(954) 321-2161

**FPL**

## Recommendations

### LIGHTING

#### General

Turn off lights when not in use.

Install occupancy sensors or wall timers in areas with transient use.

#### Fluorescent

Low Mercury T-8 lamps and electronic ballast can qualify for an increased FPL incentive.

#### Comments

Existing lighting system is standard energy saving lamps. Consider replacing to low mercury T-8, 32watt lamps with electronic ballast. I commend the city for the current lighting operation in the "Employee Only " area. The lights were turned off, utilizing indirect lighting.

Lighting accounts for approximately 40% of the total electric energy. Consider installing occupancy sensors in storage rooms, closets, office equipment rooms. Occupancy sensors can range from \$30.00 to \$150.00.

### HEATING, VENTILATION AND AIR CONDITIONING

#### Comments

Reception Area: The measured room temperature vs the thermostat setting was within proper range. I noticed the air supply vent in over the reception desk closed. In the women's bathroom, the humidity measured 48.5 deg. which is very good. In the office areas, I measured supply air in City Managers office to be at 56 deg. with a measured window temperature of 86 deg. This is a 10 deg difference which can cause condensation. Observed air gap in the center of the front exterior door and threshold of rear exterior door. The additional heat gain filters through the open gaps, increasing heat gain into the cooling space. This causes cooling cost increase. In the TV room, I noticed cool air inside the plenum space (above ceiling tiles). Check for duct leakage.

### WATER HEATING

#### General

Reduce hot water usage/install flow restrictors.

#### Comments

Consider installing flow restrictors in faucets, reducing water usage and costs.

### BUILDING

#### General

Install weather stripping on doors/windows.

Install window film or curtains.

Add Ceiling Insulation.

#### Comments

In the TV room, I measured the window at 108 deg. , the heat gain from the window has an impact on the cooling space. The room temperature measured at 79 deg. with 72 deg air supply. I highly recommend installing a solar shade or window film to reduce heat gain filtering through the window into cooling space. You may consider installing ceiling insulation, only if the roof insulation has a low R- value rating.

**TOWN OF LAUD BY THE SEA**  
4453 N OCEAN DR # CITY HALL  
LAUD BY SEA, FL 33308  
(954) 321-2161

BEE # 3107923

0	Operating Hours Per Year
\$0.00	\$/Kwd Demand Charge
\$0.0900	\$/Kwh Energy Charge
0	Tons

0	Hour Per Year AC is on
0	Diversity %
0	Months On Peak
0	AC Btu Rating



FPL

## EER vs Savings

*Use this table to determine the savings to your business when you replace inefficient air conditioning systems with more efficient equipment.*

### Annual \$ Savings from High Efficiency A/C Cooling

[illegible]

9/30/2009

BEE # 3107923

85813-46122

TOWN OF LAUD BY THE SEA  
4453 N OCEAN DR # CITY HALL  
LAUD BY SEA, FL 33308  
(954) 321-2161

**FPL**

## Air, Steam and Hot Water Leaks

*Identifies the Amount of Energy Loss and Expense You Incur With Leaking Equipment*

Hole Diameter (In.)	Air Wasted Bv (cu.ft/yr) @120 PSI	Fuel Wasted Btu/Yr (1 x 10 <sup>6</sup> ) Compressed	KWH/Yr	\$ Cost/Yr
3/8	94,360,800	846.80	248,190	\$22,337.10
1/4	41,900,190	376.00	110,200	\$9,918.00
1/8	10,475,050	94.00	27,550	\$2,479.50
1/16	2,623,480	23.50	6,900	\$621.00
1/32	632,480	5.70	1,660	\$149.40
<b>@110 PSI</b>				
3/8	86,834,000	771.50	226,100	\$20,349.00
1/4	38,580,800	342.90	100,500	\$9,045.00
1/8	3,638,600	85.60	25,100	\$2,259.00
1/16	2,412,200	21.50	6,300	\$567.00
1/32	501,000	5.50	1,600	\$144.00
<b>@100 PSI</b>				
3/8	79,900,000	710.00	208,100	\$18,729.00
1/4	35,500,000	315.60	92,500	\$8,325.00
1/8	8,880,000	78.80	23,100	\$2,079.00
1/16	2,220,000	19.80	5,800	\$522.00
1/32	553,000	4.80	1,400	\$126.00
<b>@90 PSI</b>				
3/8	72,697,000	648.30	190,000	\$17,100.00
1/4	33,133,000	294.10	86,300	\$7,767.00
1/8	8,107,000	72.00	21,100	\$1,899.00
1/16	2,027,000	18.10	5,300	\$477.00
1/32	505,000	4.40	1,300	\$117.00
<b>Steam</b>				
Diameter of Hole	@100 PSIG	\$ Cost./Day	Lb/hr @300PSI	
1/16"	14	\$2.24	33	\$5.28
1/8"	56	\$8.96	132	\$21.12
3/16"	126	\$20.16	297	\$47.52
1/4"	224	\$35.84	528	\$84.48
<b>Water</b>				
	Gal/Hr @20 PSIG	\$ Cost./Day	Gal/Hr @ 100 PSIG	\$ Cost./Day
1/16"	20	\$2.76	45	\$6.21
1/8"	80	\$11.04	180	\$24.83
3/16"	180	\$24.83	405	\$55.88
1/4"	320	\$44.15	720	\$99.33

Dollar amounts assume that the cost of gas is \$0.45 per therm and that water is \$2.00 per thousand gallons.

Your prices may vary.

Information source: Handbook of Energy Engineering 2nd edit. By Albert Thurman P.E.&D. Paul Mehca, Ph.D

9/30/2009

85813-46122

TOWN OF LAUD BY THE SEA  
4453 N OCEAN DR # CITY HALL  
LAUD BY SEA, FL 33308  
(954) 321-2161

BEE # 3107923



**FPL**

## Business Energy Evaluation Summary

### Lighting:

	<u>Lamp Tech</u>	<u># of Fixt</u>	<u>Lamps /Fixt</u>	<u>Lamp Type</u>	<u>Ballast Type</u>	<u>Oper Hr/Yr</u>	<u>Kwh Save/Yr</u>	<u>Annual Savings</u>	<u>Kw Saved</u>
Existing	Fluorescent	32	4	34 Watt-T12	E.S. Magnetic	4200			
Proposed	Fluorescent	32	3	32 Watt-T8 LM	Electronic	4200	8333	\$ 750.00	1.98

Comments:

### Insulation:

<u>Existing R-Value</u>	<u>Add R-Value</u>	<u>Final R-value</u>	<u>Sq Foot</u>	<u>Annual Savings</u>	<u>Kwh Savings</u>
0	19	19	2,500	\$ 301.27	3347

Comments Ceiling-Est sq ftg

Note: KW and kWh savings amounts stated above are estimated only. Actual demand, energy and electric cost savings may vary. Select a vendor from FPL's list of Participating vendors. Savings estimates are for a "typical" customer.

Please see Implementation Cost and Payback Analysis report for details.



9/30/2009

85813-46122

TOWN OF LAUD BY THE SEA  
4453 N OCEAN DR # CITY HALL  
LAUD BY SEA, FL 33308  
(954) 321-2161

BEE No. 3107923

**FPL**

## Implementation Cost and Payback Analysis

### Lighting:

	<u>Lamp Tech</u>	<u># of Fixt</u>	<u>Lamps</u>	<u>Lamp Type</u>	<u>Ballast Type</u>	<u>Cost</u>	<u>Savings</u>	<u>Rebate</u>	<u>Payback</u>
Existing	Fluorescent	32	4	34 Watt-T12	E.S. Magnetic				
Proposed	Fluorescent	32	3	32 Watt-T8 LM	Electronic	\$ 1,920.00	\$ 750.00	\$ 62.40	2.48 Years

Comments:

Insulation:	<u>Existing R-Value</u>	<u>Add R-Value</u>	<u>Final R-value</u>	<u>Sq Foot</u>	<u>Cost</u>	<u>Savings</u>	<u>Rebate</u>	<u>Payback</u>
	0	19	19	2,500	\$ 1,125.00	\$ 301.27	\$ 375.00	2.49 Years

Comments: Ceiling-Est sq ftg

Note: Select a vendor from FPL's list of Participating vendors. The vendor will measure and make all determinations of incentives and cost to install. All incentive amounts will be finalized on the actual installed products and will not be confirmed until post-approval.



9/30/2009

BEE # 3107923

85813-46122

**TOWN OF LAUD BY THE SEA**  
4453 N OCEAN DR # CITY HALL  
LAUD BY SEA, FL 33308  
(954) 321-2161

## General Information

### **Where your Energy Dollars Go:**

I've also included an Energy Use Report to show where your company is spending most of its energy dollars. It shows which equipment or appliances are consuming the most energy in your facility. You can use this information to better understand your current usage and help you determine which energy-saving measures make the most economic sense for your business.

### **Alternative FPL Rate Analysis:**

I've evaluated your current electric rate and determined that you could lower your energy costs by choosing an alternative FPL rate. (Please refer to the comments section in this report for additional information about the most economical FPL rate for your business.)

### **Power Monitoring Service:**

FPL's Power Monitoring Service is a remote monitoring system designed to let you know within minutes if a momentary interruption, high- or low-voltage event or power outage has occurred at your facility, and when power was restored the system immediately notifies FPL of the event, which can help reduce costly equipment damage and keep your facility operating. Because it's available 24 hours a day, the service is ideal for facility managers who do not staff around the clock or manage multiple facilities. (For more information about this valuable service, please refer to the enclosed Power Monitoring brochure.)

09/30/2009

85813-46122

TOWN OF LAUD BY THE SEA

4453 N OCEAN DR # CITY HALL

LAUD BY SEA, FL 33308

(954) 321-2161

BEE # 3107923



**FPL**

## Energy Use Summary Report

Equipment	# of Units	kWh/ Month	Peak kW	Est Cost	% of Bill
<b>LIGHTING</b>					
Fluorescent 34 Watt-T12 4ft Lamp	32	1613	4.6	\$145	100.0%
Comments: Throughout facility					
<b>Sub Total</b>		<b>1613</b>	<b>4.6</b>	<b>\$145</b>	<b>100.0%</b>
<b>Bill Amount:</b>		<b>1613</b>	<b>5</b>	<b>\$145</b>	<b>100.0%</b>

### Electric Charges

0.0900 \$/Kwh

.00 \$/Kwd

09/30/2009

85813-46122

TOWN OF LAUD BY THE SEA

4453 N OCEAN DR # CITY HALL

LAUD BY SEA, FL 33308

(954) 321-2161

BEE # 3107923



**FPL**

## Energy Use Detail Report

*Analysis of your major equipment's impact on your energy bill*

Equipment	# of Units	Est Kw/Each	Conn Kw	Oper Hrs/Mn	kWh/ Month	Peak Kw	Est Cost	% of Bill
<b>LIGHTING</b>								
Fluorescent 34 Watt-T12 4ft Lamp	32	0.14	4.61	350	1613	4.6	\$145	100.0%
Comments: Throughout facility								

<b>Sub Total</b>			<u>4.61</u>		<u>1,613.00</u>	<u>4.6</u>	<u>\$145</u>	<u>100.0%</u>
<b>Bill Amount:</b>			<u>4.61</u>		<u>1613</u>	<u>5</u>	<u>\$145</u>	<u>100.0%</u>

### Electric Charges

0.0900 \$/Kwh

.00 \$/Kwd

9/30/2009

BEE # 3107923

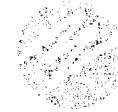
85813-46122

TOWN OF LAUD BY THE SEA

4453 N OCEAN DR # CITY HALL

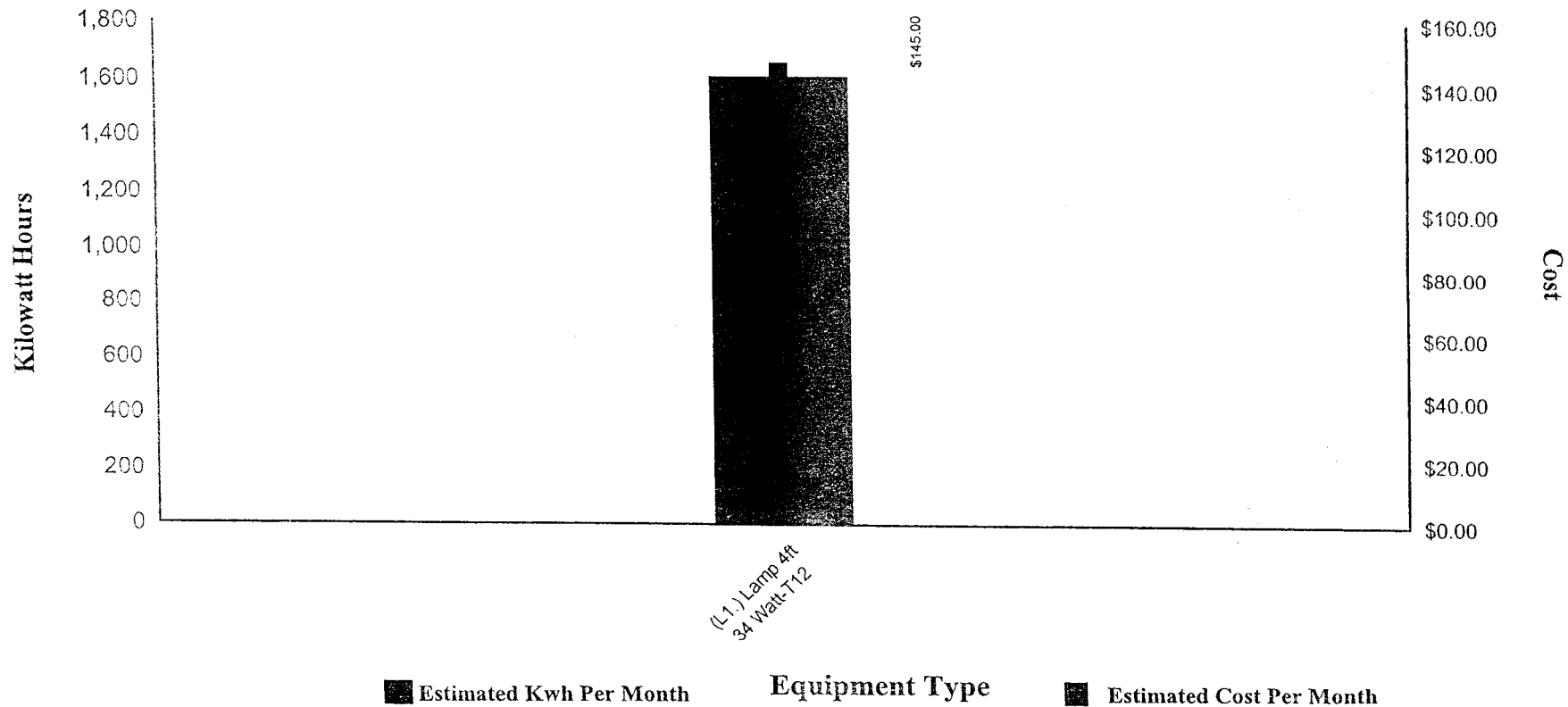
LAUD BY SEA, FL 33308

(954) 321-2161



**FPL**

## Kilowatt Hour Usage & Cost by Equipment



9/30/2009

85813-46122

TOWN OF LAUD BY THE SEA

4453 N OCEAN DR # CITY HALL

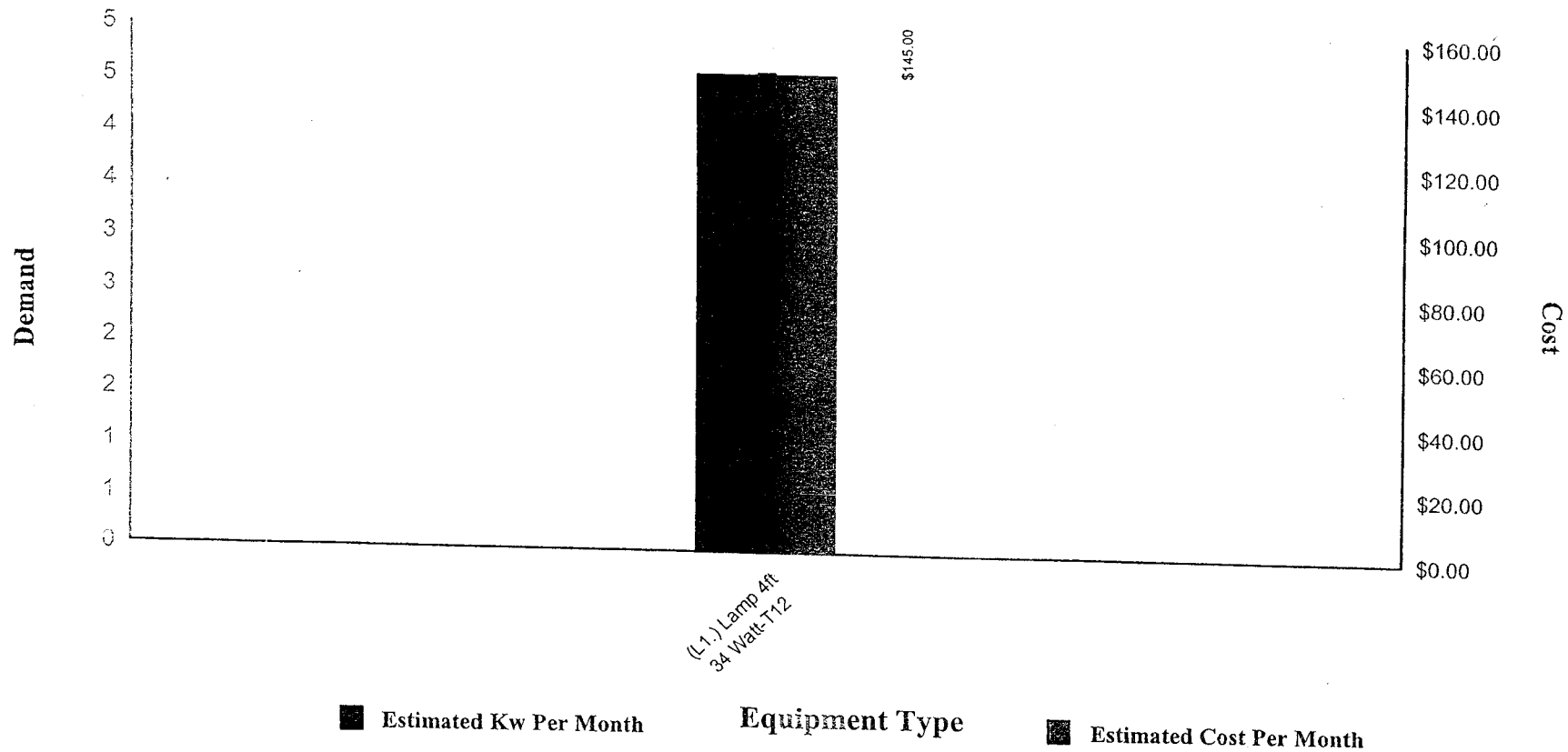
LAUD BY SEA, FL 33308

(954) 321-2161

BEE # 3107923

FPL

## Demand Usage & Cost by Equipment



9/30/2009

BEE # 3107923

85813-46122

TOWN OF LAUD BY THE SEA  
 4453 N OCEAN DR # CITY HALL  
 LAUD BY SEA, FL 33308  
 (954) 321-2161

**FPL**

## 2 Year Usage History Report

*Shows your facility's current 12 month's energy consumption pattern to the previous 12 months*

Billing Date	Days	KWH per Day	kWh	kWd	Load Factor %	Current Bill	Balance Due
09/03/2009	29	199	5,760	0	0%	\$693.49	\$693.49
08/05/2009	29	210	6,099	14	63%	\$724.13	\$724.13
07/07/2009	32	202	6,471	13	65%	\$661.69	\$661.68
06/05/2009	30	186	5,593	13	60%	\$591.21	\$591.21
05/06/2009	29	183	5,299	12	63%	\$567.51	\$567.51
04/07/2009	29	159	4,597	13	51%	\$521.46	\$521.46
03/09/2009	31	123	3,813	11	47%	\$440.43	\$436.83
02/06/2009	30	130	3,888	12	45%	\$454.80	\$454.80
01/07/2009	34	132	4,487	11	50%	\$496.03	\$496.03
12/04/2008	31	109	3,381	11	41%	\$411.10	\$411.10
11/03/2008	31	149	4,613	13	48%	\$533.09	\$533.09
10/03/2008	29	180	5,207	14	53%	\$590.98	\$590.98

<b>Totals/Avg</b>	<b>30</b>	<b>163</b>	<b>59,208</b>	<b>11</b>	<b>49%</b>	<b>\$6,685.92</b>	
09/04/2008	30	186	5,573	14	55%	\$622.79	\$622.79
08/05/2008	29	397	11,507	32	52%	\$1,270.22	\$1,270.22
07/07/2008	32	438	14,003	33	55%	\$1,373.50	\$1,373.50
06/05/2008	30	423	12,683	30	59%	\$1,248.22	\$1,248.22
05/06/2008	29	357	10,362	27	55%	\$1,044.61	\$1,044.61
04/07/2008	31	328	10,178	27	51%	\$1,029.34	\$1,029.34
03/07/2008	29	308	8,939	27	48%	\$932.48	\$932.48
02/07/2008	30	307	9,196	27	47%	\$952.56	\$952.56
01/08/2008	34	332	11,292	28	49%	\$1,123.74	\$1,123.74
12/05/2007	33	310	10,228	32	40%	\$1,077.44	\$1,077.44
11/02/2007	29	363	10,519	27	56%	\$1,064.12	\$1,064.12
10/04/2007	29	378	10,958	28	56%	\$1,106.37	\$1,106.37
<b>Totals/Avg</b>	<b>30</b>	<b>344</b>	<b>125,438</b>	<b>28</b>	<b>52%</b>	<b>\$12,845.39</b>	

# Comparison of Average Temperature to Usage

## Min, Max, and Avg Temp, Cooling and Heating Degree Days

Current Billing Period By Cycle Day

Day	Min	Max	Avg Temp	CDD	HDD
Wed-Aug -5-09	82	92	85	20	0
Thu-Aug -6-09	80	90	85	20	0
Fri-Aug -7-09	81	92	86	21	0
Sat-Aug -8-09	82	91	86	21	0
Sun-Aug -9-09	83	92	86	21	0
Mon-Aug -10-09	79	91	84	19	0
Tue-Aug -11-09	78	90	83	18	0
Wed-Aug -12-09	81	91	84	19	0
Thu-Aug -13-09	79	90	84	19	0
Fri-Aug -14-09	82	92	86	21	0
Sat-Aug -15-09	74	86	79	14	0
Sun-Aug -16-09	76	91	84	19	0
Mon-Aug -17-09	80	91	85	20	0
Tue-Aug -18-09	81	92	85	20	0
Wed-Aug -19-09	76	88	83	18	0
Thu-Aug -20-09	82	91	86	21	0
Fri-Aug -21-09	81	92	86	21	0
Sat-Aug -22-09	78	91	82	17	0
Sun-Aug -23-09	79	90	82	17	0
Mon-Aug -24-09	78	89	82	17	0
Tue-Aug -25-09	78	91	84	19	0
Wed-Aug -26-09	79	90	84	19	0
Thu-Aug -27-09	78	92	84	19	0
Fri-Aug -28-09	81	92	85	20	0
Sat-Aug -29-09	81	94	85	20	0
Sun-Aug -30-09	79	91	84	19	0
Mon-Aug -31-09	80	91	84	19	0
Tue-Sep -1-09	77	89	81	16	0
Wed-Sep -2-09	78	88	80	15	0
Thu-Sep -3-09	77	91	80	15	0

Last Month Billing Period This Year

Day	Min	Max	Avg Temp	CDD	HDD
Sun-Jul -5-09	78	91	84	19	0
Mon-Jul -6-09	79	94	86	21	0
Tue-Jul -7-09	80	95	87	22	0
Wed-Jul -8-09	81	93	85	20	0
Thu-Jul -9-09	79	92	85	20	0
Fri-Jul -10-09	79	89	84	19	0
Sat-Jul -11-09	77	91	84	19	0
Sun-Jul -12-09	77	92	84	19	0
Mon-Jul -13-09	80	91	84	19	0
Tue-Jul -14-09	79	91	85	20	0
Wed-Jul -15-09	82	92	85	20	0
Thu-Jul -16-09	81	93	86	21	0
Fri-Jul -17-09	82	93	87	22	0
Sat-Jul -18-09	80	93	85	20	0
Sun-Jul -19-09	78	93	84	19	0
Mon-Jul -20-09	74	90	81	16	0
Tue-Jul -21-09	74	90	82	17	0
Wed-Jul -22-09	80	92	85	20	0
Thu-Jul -23-09	81	90	83	18	0
Fri-Jul -24-09	78	90	84	19	0
Sat-Jul -25-09	74	86	80	15	0
Sun-Jul -26-09	75	91	80	15	0
Mon-Jul -27-09	77	90	83	18	0
Tue-Jul -28-09	80	90	84	19	0
Wed-Jul -29-09	79	90	82	17	0
Thu-Jul -30-09	79	87	83	18	0
Fri-Jul -31-09	80	91	85	20	0
Sat-Aug -1-09	81	90	85	20	0
Sun-Aug -2-09	82	90	86	21	0
Mon-Aug -3-09	83	92	86	21	0
Tue-Aug -4-09	83	92	86	21	0

Same Billing Period Last Year

Day	Min	Max	Avg Temp	CDD	HDD
Tue-Aug -5-08	79	91	84	19	0
Wed-Aug -6-08	81	91	85	20	0
Thu-Aug -7-08	80	93	84	19	0
Fri-Aug -8-08	80	89	83	18	0
Sat-Aug -9-08	78	92	83	18	0
Sun-Aug -10-08	75	88	80	15	0
Mon-Aug -11-08	77	89	82	17	0
Tue-Aug -12-08	75	87	80	15	0
Wed-Aug -13-08	75	93	84	19	0
Thu-Aug -14-08	74	91	80	15	0
Fri-Aug -15-08	75	91	83	18	0
Sat-Aug -16-08	79	92	85	20	0
Sun-Aug -17-08	80	90	84	19	0
Mon-Aug -18-08	74	83	78	13	0
Tue-Aug -19-08	77	86	81	16	0
Wed-Aug -20-08	79	88	82	17	0
Thu-Aug -21-08	77	90	81	16	0
Fri-Aug -22-08	74	90	81	16	0
Sat-Aug -23-08	78	89	83	18	0
Sun-Aug -24-08	77	89	83	18	0
Mon-Aug -25-08	77	90	83	18	0
Tue-Aug -26-08	80	91	83	18	0
Wed-Aug -27-08	79	91	85	20	0
Thu-Aug -28-08	81	90	85	20	0
Fri-Aug -29-08	80	89	84	19	0
Sat-Aug -30-08	81	86	83	18	0
Sun-Aug -31-08	80	88	84	19	0
Mon-Sep -1-08	81	91	85	20	0
Tue-Sep -2-08	80	90	84	19	0
Wed-Sep -3-08	81	89	84	19	0



	Curr	Prev	Prev Yr
TOTAL HEATING DEGREE	0	0	0
TOTAL COOLING DEGREE	564	595	536
DAYS 92 AND ABOVE	9	13	4
DAYS BELOW 45	0	0	0

	Curr	Prev Min	Prev Yr
HIGHEST TEMPERATURE	94	95	93
AVERAGE LOW TEMPERATURE	79	79	78
AVERAGE HIGH TEMPERATURE	91	91	90
LOWEST TEMPERATURE	74	74	74
AVERAGE OVERALL TEMP	84	84	83

9/30/2009

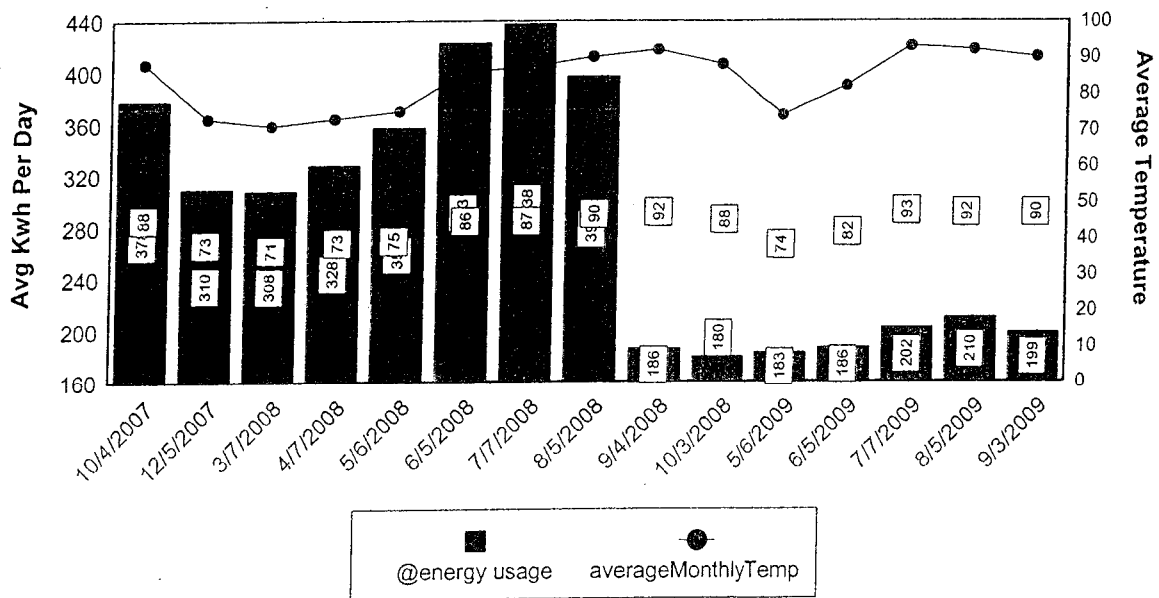
BEE # 3107923

8581346122

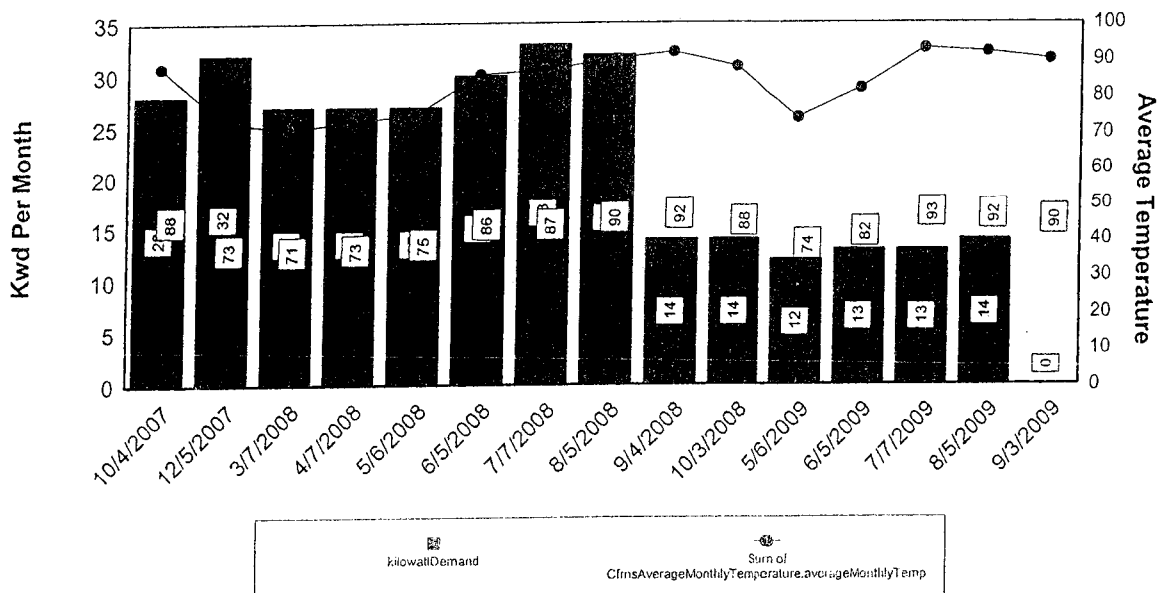
TOWN OF LAUD BY THE SEA  
4453 N OCEAN DR # CITY HALL  
LAUD BY SEA, FL 33308  
(954) 321-2161

FPL

## Temperature vs KWH



## Temperature vs KWD



9/30/2009

85813-46122

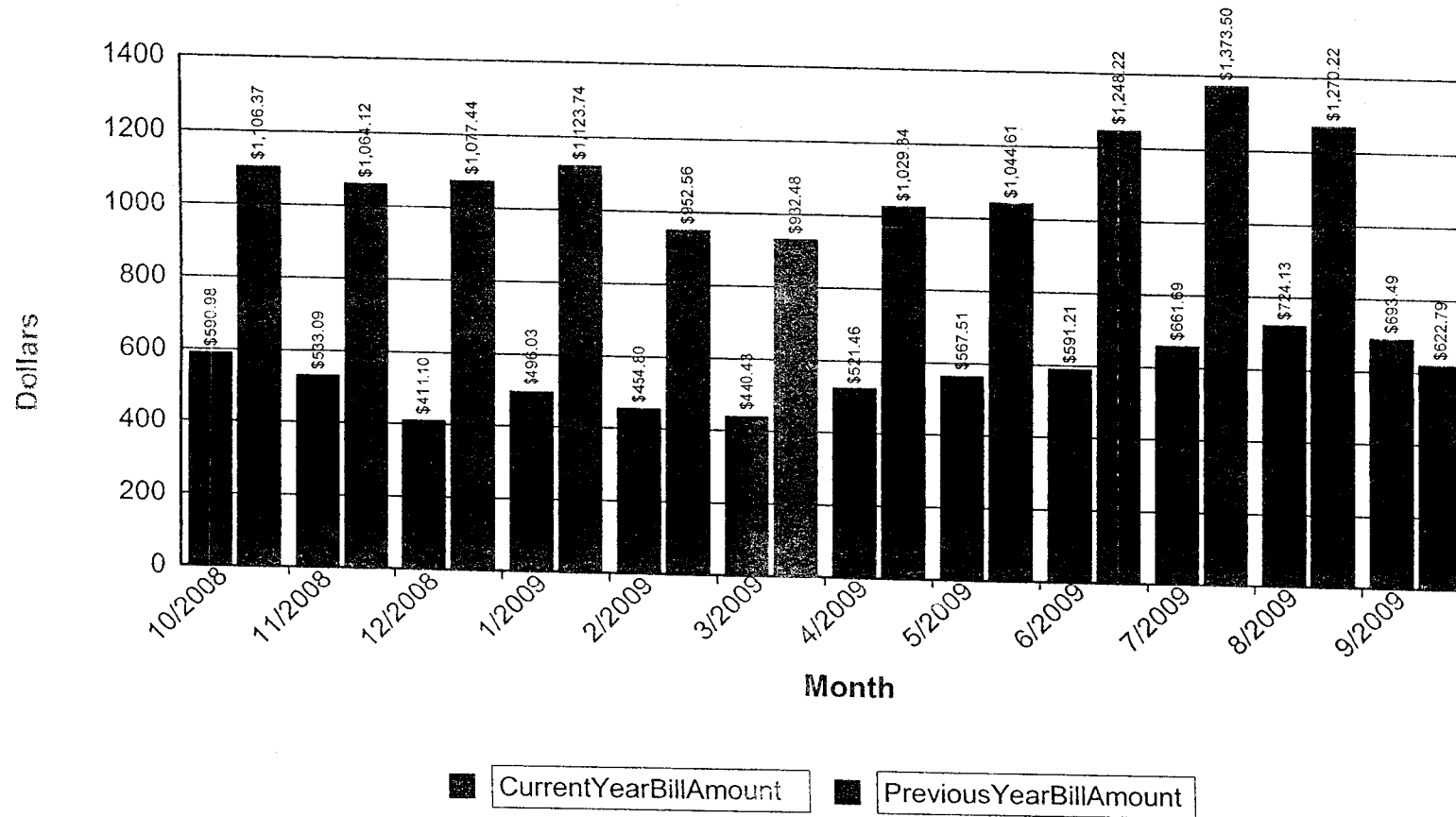
TOWN OF LAUD BY THE SEA  
4453 N OCEAN DR # CITY HALL  
LAUD BY SEA, FL 33308  
(954)321-2161

BEE # 3107923



**FPL**

## Bill Amount Comparison



9/30/2009

85813-46122

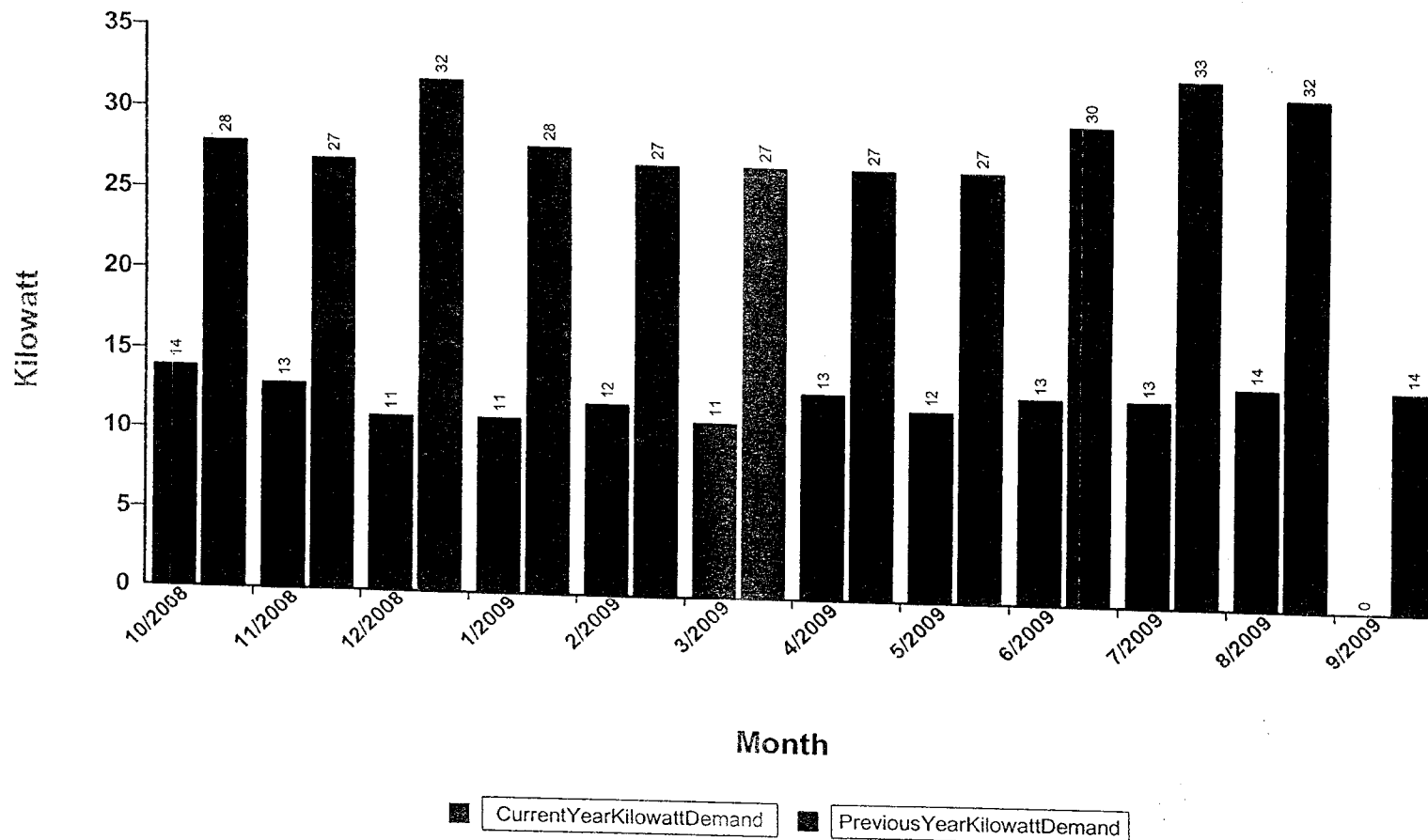
TOWN OF LAUD BY THE SEA  
4453 N OCEAN DR # CITY HALL  
LAUD BY SEA, FL 33308  
(954)321-2161

BEE # 3107923



**FPL**

## Monthly Demand Comparison



9/30/2009

85813-46122

TOWN OF LAUD BY THE SEA  
4453 N OCEAN DR # CITY HALL  
LAUD BY SEA, FL 33308  
(954)321-2161

BEE #3107923



**FPL**

## KWH Per Day Comparison

